

ELECTRICITY COMPETITION—Volume 3

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BEFORE THE
SUBCOMMITTEE ON ENERGY AND POWER
OF THE
COMMITTEE ON COMMERCE
HOUSE OF REPRESENTATIVES
ONE HUNDRED SIXTH CONGRESS
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SEPTEMBER 13, 1999—THE ROLE OF THE TENNESSEE VALLEY
AUTHORITY

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(II)

CONTENTS

	Page
Hearings held:	
July 15, 1999	1
September 13, 1999	79
Testimony of:	
Anderson, Darrell, Environment and Energy Staff, General Motors, representing Tennessee Valley Industrial Committee	108
Baker, James O., President, Middle Tennessee Electric Membership Corporation, representing Tennessee Valley Public Power Association	99
Clark, Jordan, President, United Homeowners Association	53
D'Alessio, R. Dale, Chief Executive Officer, iSoft	63
Deless, Donald, President, D&C Development Company	66
Fleming, Larry A., President and CEO, Knoxville Utilities Board	103
Larson, Lyle D., Counsel, TVA Watch	111
Medford, Mark, Executive Vice President, Customer Service, Tennessee Valley Authority	93
Mertens, Hans, Manager, Government Affairs and Planning, Williams Distributed Power Services, Inc	57
Mittleman, Gary, President and CEO, Plug Power	13
Perry, Ronald L., President, Commercial Energy of Montana	7
Philbin, Edward J., former Chairman, Federal Maritime Commission and former Chairman, Interstate Commerce Commission	20
Randolph, Kenneth E., Senior Vice President and General Counsel, Dynegy, Inc	17
Tribone, Thomas A., Executive Vice President, AES Corporation	24
Material submitted for the record by:	
Ferrell, James E., Chairman, Coalition for Fair Competition in Rural Markets, prepared statement of	144

(III)

INNOVATION AND THE FUTURE

THURSDAY, JULY 15, 1999

HOUSE OF REPRESENTATIVES,
COMMITTEE ON COMMERCE,
SUBCOMMITTEE ON ENERGY AND POWER,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:30 a.m., in room 2123, Rayburn House Office Building, Hon. Joe Barton (chairman) presiding.

Members present: Representatives Barton, Largent, Burr, Rogan, Shimkus, Wilson, Pickering, Fossella, Bryant, Ehrlich, Hall, McCarthy, Sawyer, Markey, Pallone, and Wynn.

Staff present: Cathy Van Way, majority counsel; Curry Hagerty, majority counsel; and Rick Kessler, minority professional staff.

Mr. BARTON. If everyone could find a seat, we are told that Congressman Hall is going to be a little bit late and we are going to go ahead and convene the hearing.

The Chair would recognize himself for an opening statement.

I would like to welcome everyone to today's hearing on electricity utility restructuring. Today's hearing will focus on competition and innovation.

This will likely—and I think you all would say “thankfully”—be our last day of oversight hearings on this subject. Next Thursday we will hold our first day of legislative hearings on a bill that is being drafted literally as I speak, and I hope that everyone, members and witnesses alike, will come prepared to discuss specifically what should and should not be included in a comprehensive Federal restructuring bill.

Today's hearing is a good transition for future legislative hearings because it shows us the possibilities that the future holds for electricity consumers if we in fact allow competition to flourish.

We would not even be here discussing retail competition were it not for the technological advances of utility interconnections and the ability to wheel power.

The ability to wheel power, coupled with legislative and regulatory changes in PURPA, the Energy Policy Act, and FERC Order 888 have radically changed the way we think about generating, transmitting, and distributing electricity.

Consumers have benefited from those changes already through lower prices. It is increasingly clear that there are no technological barriers to opening up the retail electric system to competition.

With the convergence of the utility industry with other technology such as the Internet, the benefits consumers will see will not just be limited to price.

Already this year we have heard from electricity providers marketing electricity over the Internet, Internet companies providing consumers with price and other information about electricity, and companies developing new ways to transmit electricity more efficiently.

Investor, municipally, and cooperatively owned utility companies are investing in distributing generation and looking for ways to package services like long distance telephone service, cable television, Internet, and home security, along with their traditional product of electricity.

At today's hearing we hope to hear about a few of the innovations that are around the corner. Some are directed at generating electricity in ways that are cleaner, more efficient, and less expensive. Other technologies are being developed on the consumption side such as meters that can read in real time how much individual appliances are consuming, and smart appliances that can be controlled from remote locations.

An open marketplace encourages individuals and companies alike to invest in innovation. As retail competition sweeps the country, this trend will only increase.

However, as we consider Federal restructuring legislation, our task is to make sure that the marketplace is as open as possible, that there are no barriers to these types of innovations, and others that we may not know of yet, from reaching the marketplace.

If we are not careful, we can stop innovation in its tracks. I am especially interested to hear from today's witnesses about what provisions need to be included in a Federal restructuring bill to allow innovation to grow and continue to bring the benefits of electricity to consumers.

Again, I welcome everyone, especially our two panels, today to today's hearing. I am sure that everyone in attendance today will find it very informative.

Would the gentleman from New Jersey wish to make an opening statement?

Mr. PALLONE. Thank you, Mr. Chairman.

This hearing is especially timely from my perspective because in my District and other parts of New Jersey in the Northeast we just experienced a series of blackouts and brownouts.

These occurred, in part, due to old, out-of-date equipment which needs to be replaced with new, more efficient and more reliable technology.

We also need to emphasize conservation and provide incentives for alternative and/or backed up forms of power that rely less on the power grid and reduce the burden on the grid.

In addition, in order to spur growth and have our industries compete in the domestic and international marketplaces, innovation in technology will be increasingly necessary.

Utilities and other companies such as we will hear from today are working to develop products and services to provide consumers with more reliable service in a cheaper and more efficient manner. Removing barriers that preclude or inhibit competition is critical to achieving these goals.

I have continually supported tax credits and other incentives for weatherization programs, renewable energy, voluntary energy effi-

ciency programs for homes, buildings, et cetera, and will continue to do so.

We must make sure we provide affordable power that is reliable and efficient for all consumers. By doing this, we will improve protection of air quality and our natural resources, as well.

The experience in my District highlighted the real need to bring new technologies to market as quickly as possible. For example, hospitals, police, and fire stations could use distributed generation as backup power sources to make their own energy service more reliable.

To this end, incentives to promote distributed generation and renewable energy technology such as are included in the administration's bill would be worthwhile, in my opinion.

Superconductivity is another method that would facilitate power transmission and reduce the amount of energy needed by maintaining more power as it travels across the power lines. Therefore, I would support efforts to provide increased funding for research and development for superconductivity.

Implementing innovative methods in technologies would increase system reliability as well as the efficient use of energy, and thereby reduce impacts to the environment and lower costs for consumers and industry alike. And so we would have a win/win situation all around.

I will be introducing a bill probably next week that also will promote energy efficiency and renewable energy technologies, and in particular my bill aims to increase the use of fuel cells and other emerging technologies.

I look forward to hearing from our witnesses and working with them and other members of this committee to promote these exciting technologies.

Thank you again, Mr. Chairman.

Mr. SHIMKUS [presiding]. I thank the gentleman from New Jersey.

I would just like to welcome the panel also. I have been on the committee for 3 years, and energy deregulation has been probably one of the consuming things that I have been doing as a Member of Congress. It has really changed even in the 3 years that I have been here.

It is really an exciting time. I have been able to watch industry as industry is repositioning itself to meet this new era. We are working aggressively in a way that is much different than I have experienced in even other subcommittees as far as having a working group.

As many of you know, we have been sitting down across the aisle with the chairman and the ranking member working on energy dereg, and that is why this hearing is so important today to make sure we have our sights not just on the present but continuing on into the future.

I appreciate the comments from the gentleman from New Jersey because about this time last year in the Midwest we experienced the high price spikes. But I am encouraged by the fact that the market really is responding quickly as we see new generation projected in the Midwest.

As many of you who have been following the issue know, part of the working group's main concern has been also on the reliability in the transmission system and to make sure that, as we enter this new era, that the power is able to be transmitted and received from a lot longer distances than under the old regional monopoly system.

That is where I think technology is going to be exciting, too, because it is going to open up a new arena that helps us to continue to start thinking outside the box, which is difficult when you are trying to learn about the box. It is more difficult to think outside the box if you are spending a lot of time just trying to understand the box to begin with.

So that is why I look forward to the hearing today. With that, I would like to yield to the ranking member, Congressman Hall, from Texas.

Mr. HALL. Mr. Chairman, I thank you. I thank you for the hearing.

We have pretty well come to understand or to believe that we are nearing the last of the hearings on electrical restructuring, if some of the rumors that I hear and some of the direct information that I get, we hopefully are approaching a time when we will really get down to business and start putting stuff together where you men and women can look at it and advise us and help us. We thank you for the help you are going to do for us today.

The issue today is innovation and change in the future. As I look over the witness list, for the most part I see names of companies that I am not terribly familiar with, or have not been but am honored to be. This is really, Mr. Chairman, a slice of the new face of the electric utility business. Broadly defined, they are the innovators, the technologists, people who dare to probe and want to deliver.

I think some of the creative thinkers are looking at this business in new and different ways and seeing possibilities for services and efficiencies that have not been seen before.

So I am anxious to listen to the testimony here today. I think we need to understand their position a little bit better and the opportunities and the barriers that they see and how we can remove some of those barriers and how we can work with them to help them bring their products, their technologies, and their services to the marketplace, which is the goal of the legislation we are attempting to write now.

I want to welcome two witnesses from Texas to the subcommittee today. Ken Randolph, who I am very proud of. He is with Dynegy in Houston, whose companies has been one of the leaders in market innovation first in natural gas and now in electricity. So he is pretty well spanning the globe for us.

I also welcome General Philbin. We are honored to have you here, of Media Technologies. I think he lists his address as Evergreen, Colorado, but a lot of Coloradans complain that Texas has taken over Colorado.

And the truth is, Colorado is inhabited by people from Iowa who do not want any more Texans.

Although this complaint has been made, Media Fusion is a company that I think is headquartered in Dallas—

Mr. PHILBIN. Yes, sir.

Mr. HALL. [continuing] which is just 15 miles behind Rockwall's water tower. You're just right down the road from us there. You certainly got your start there, and recently opened a research facility at the Stennis Space Center in Mississippi.

So there are a lot of good things that are going on. So, Chip Pickering, wherever you are, we will have to share credit with Texas for Media Fusion and its startup. It looks like it has some great prospects for revolutionizing the delivery of broadband services by means of the electric grid.

Mr. Chairman, as a footnote and as a member of the Science Committee, I might also add that Media Fusion's arrangement to conduct research at NASA's Stennis Center is a very good example of what this committee and what the Science Committee in this Congress has tried to do, to get this example of public and private sector working together to bring facilities and I guess brain power together to yield benefits for all of us.

I am looking forward to the testimony today, and I yield back the balance of my time.

Mr. SHIMKUS. With that, we will move to Congressman Ed Bryant, the Gentleman from Tennessee.

Mr. BRYANT. Thank you, Mr. Chairman.

I want to thank this committee, as our ranking member said, for having so many hearings on this very important issue. Certainly today is a little bit different approach than what I am used to seeing. I am fairly new to the committee and look forward to hearing the testimony from both panels.

It was a late night last night. I think we finished voting after midnight. So there are probably several of our colleagues who have not started moving around very fast today, and we apologize for that.

Also, I know from my own standpoint I will have to leave and go to another subcommittee meeting very shortly on another very important issue of health care. Then, beyond that, to another meeting on TVA which is, as most of you would expect, is a very important issue to Tennessee as we begin to talk about not deregulation but restructuring. We are probably going to re-regulate in whatever we do.

But I think it is important to have you gentlemen here today. I have reviewed some of the statements, and I intend to review all of the statements and listen to as many of you as I can.

I am particularly interested in the second panel, the homeowners and the home builders and what they are saying about this. Again, this is not a stranded cost issue, but I notice the homeowners' representative talks about the effect, in reality not in theory, of what is actually happening in California with stranded costs and something of a negative impact there.

But I think the home builders are talking about how Congress should help out with innovation and the ways that we can perhaps incentivize in the tax code, and kind of get out of the way and let things happen and not be an obstructionist in any way.

I think, as technology develops and your ideas are out there, we as a Congress do not need to stand in the way, and certainly health care is another area where the technology is so far ahead of us in Congress right now that we just need to sit back and listen and

then be prepared to take your advice very wisely given and use it, again not to be a hindrance, but to let you folks work. And hopefully in the end certainly the country will benefit by it.

With that, Mr. Chairman, I look forward to this and yield back my time.

Mr. SHIMKUS. The gentleman yields back his time.

The Chair now recognizes the gentleman from California, Mr. Rogan, for an opening statement.

Mr. ROGAN. Mr. Chairman, thank you.

I do have an opening statement. I ask unanimous consent of the committee that I simply have it introduced for the record. It would be redundant of me to keep delivering the same opening statement every time we have one of these hearings. I am a great supporter of deregulation. My State of California is one of the leaders in that effort. But rather than bore everybody with my same pronouncements, I simply ask unanimous consent to insert it into the record.

Mr. SHIMKUS. Is there objection?

[No response.]

Mr. SHIMKUS. Without any objection, so ordered.

[The prepared statement of Hon. James Rogan follows:]

PREPARED STATEMENT OF HON. JAMES E. ROGAN, A REPRESENTATIVE IN CONGRESS
FROM THE STATE OF CALIFORNIA

Mr. Chairman, I thank you for holding this hearing on how our growing technology industry can enhance our efforts to promote a competition-based electricity industry.

I would also like to share my appreciation for each member of today's panels. You represent the many companies which can make the power industry thrive through innovation and competition. Without the high technology developments generated over the past several years, our economy would not be thriving. I look forward to seeing the ingenuity of our high-technology industry help prepare the electricity industry for the next millennium.

As you know, California is often at the forefront of business and public policy in America. Southern California's high-technology industry continues to provide a major boost to our national economy and serves as a leader in software and technological advancements. In addition, in 1996, California passed electricity restructuring legislation when I was Majority Leader in the State Assembly.

Our state's leading technology businesses, in combination with our efforts to create a competitive electricity industry, will provide Californians with greater options, reduced electricity rates, and increased access to the best electricity services. It is my hope that this hearing will demonstrate how the rest of the nation can benefit with this type of partnership between a competitive electricity industry and a vibrant technology industry.

In addition, I am interested to learn more about how software products can improve electricity services for consumers. It is my hope that Mr. D'Alessio's testimony will discuss exactly how utility companies that are deregulated benefit from the type of software his company, iSoft, produces. Further, I am curious to know how web-enabled billing can enhance a competitive electricity industry.

Again, Mr. Chairman, I appreciate your ongoing efforts to explore every aspect of electricity restructuring policies. I look forward to hearing the testimony of the witnesses.

[Additional statement submitted for the record follows:]

PREPARED STATEMENT OF HON. TOM BLILEY, CHAIRMAN, COMMITTEE ON COMMERCE

Mr. Chairman, I want to commend you for holding this hearing today on competition and innovation. The issues we will consider today and how we ultimately deal with them can have far-reaching and long-lasting impacts. Over the next few weeks, Congress can act to either encourage or stifle innovation in retail electricity markets.

I know that with you at the helm we will pass legislation that will foster innovation. Consumers will surely benefit from new value and conveniences in the new re-

tail marketplace for electricity. New technology reduces costs and increases options for residential, commercial and industrial consumers. In crafting comprehensive electricity legislation we must unleash competition and innovation to have a profound impact on products and services available to American electricity consumers.

As in the telecommunications industry, once competition begins to be unleashed, innovation flourishes. Telephone consumers now have digital phones with voice mail, call waiting, text messaging, and even games. They can pay for using those phones according to usage or with a flat rate for both local and long-distance calling. No more black rotary phones, if anyone can still remember them.

Similarly, innovation in the electricity sector is happening at every level: generation, transmission, distribution, and at the point of consumption. In the future consumers may be able to buy electricity from the supplier of their choice tailored to their own particular situation rather than being forced to buy the only package offered from the monopoly allowed to serve their street.

Like the telco's of yesteryear, the utility industry is not accustomed to providing consumers with new choices, money-saving services, or bonuses to increase customer satisfaction and convenience—at least not until the onset of competition. Now with retail competition upon us all types of suppliers are beginning to explore and bring to consumers new technologies and find ways to package services in ways that fit the needs of individual families or businesses.

New opportunities and products will have a direct relationship on American consumers and American competitiveness. Giving consumers what they want, at a price they can afford to pay will open markets, create a new pool of skilled jobs and cut prices for America's hottest commodity—electrical power.

The role technology plays in reducing costs and increasing options for residential consumers is central to the Subcommittee's consideration of legislation. As we develop bipartisan consensus we must put in place strong provisions that assure that there are no barriers to keep out new entrants and innovators in electricity markets.

Mr. Chairman, I look forward to hearing the testimony.

Mr. SHIMKUS. Now we will move to the panel.

There are some benefits to not having a lot of members present. You do not have to sit through all the opening statements and we can go straight to the panelists.

So I would like to recognize for 5 minutes, and as is the process here in the Commerce Committee, your full written statements you have already submitted, we would like for you to attempt to summarize conversationally with us for 5 minutes and then we will have a chance for a round of questions after the panel has conducted the testimony.

So I would like to recognize Mr. Ron Perry, President of Commercial Energy of Montana, and again for 5 minutes. You may begin.

STATEMENTS OF RONALD L. PERRY, PRESIDENT, COMMERCIAL ENERGY OF MONTANA; GARY MITTLEMAN, PRESIDENT AND CEO, PLUG POWER; KENNETH E. RANDOLPH, SENIOR VICE PRESIDENT AND GENERAL COUNSEL, DYNEGY, INC.; EDWARD J. PHILBIN, FORMER CHAIRMAN, FEDERAL MARITIME COMMISSION AND FORMER CHAIRMAN, INTERSTATE COMMERCE COMMISSION; AND THOMAS A. TRIBONE, EXECUTIVE VICE PRESIDENT, AES CORPORATION

Mr. PERRY. Thank you, Mr. Chairman.

I am grateful for the invitation to address you and your colleagues today. Thank you for the opportunity.

My name is Ron Perry and, with my wife Barbara, we founded Commercial Energy of Montana in 1997. Commercial Energy is a small, customer-focused marketer of natural gas and electricity in Montana.

Our company is an aggregator of the local mom and pop gas producers of northern Montana. This model is very similar to how Dynegy was started about 12, 13 years ago by Mr. Watson.

We are different from other aggregators in that we market directly to the end-use customer. From our point of view, electricity competition in Montana has been a great success. In 2 years, Commercial Energy has become Montana's largest non-utility-affiliated energy marketer.

Our customers are a cross section of Montana. We serve over 90 percent of the eligible hospitals in the State, the best hotels in every city including Glacier Park Lodge, Hooterville Colonies, small manufacturers, dry cleaners, even branches of national chain stores.

We are talking with the irrigation districts to help our farmers lower their costs of energy in running their rural farms in Montana.

In fact, in total we provide energy for more than 40 percent of the eligible gas businesses in the State and for more customers than any active electricity marketer in the State of Montana.

Our success is due in part to the fact that Montana was the first low-cost-of-power States to deregulate. That decision has been very good for us and for our businesses.

During the first 2 years of operation, our customers have saved over 30 percent on their natural gas bills. They have also saved 5 to 10 percent on their electricity bills based on how much risk they were willing to assume in the marketplace.

For one of our rural hospitals, a 100-bed hospital, that means saving about \$25,000 a year. That is just the beginning.

We believe that deregulation creates new jobs and opens up a \$500 billion industry to customer choice. That will be a diverse and dynamic competitive market with a variety of market segments for providers to focus on.

Entrepreneurial firms like ours understand these segmentations, whether it is industrial customers, residential customers, or commercial accounts. And we even understand the geographic market segments.

We choose the segments that offer the best returns. The fact that Montana is a rural State tells us a lot about how these energy markets are actually going to function, especially when we think that half the population lives in these States.

Large businesses, including the largest power suppliers, will concentrate their work in the 40 metropolitan areas. That is understandable. But in places like Montana we do not have 20 different marketers on television and radio and on the telephone espousing their virtues.

That does not mean there is not competition. All it means is that business is conducted in a different way. It is personal, and those relationships are more important than just simply having the lowest price.

I would remind the committee that the world's largest retailer did not start in Houston, Texas, or New York City. Wal-Mart started in a little town called Bentonville, Arkansas, that we had never heard of, but they did it in an entrepreneurial way and came out of nowhere.

That is what is going to happen with energy, we believe.

Our company looked at the energy market that way. We realize that that customer relationship is the key. The advantage of an open market is that you can have real product integration as well that breaks down traditional lines.

We started with a natural gas relationship and leveraged it to an electricity relationship. We understood that to grow we need to add these revenue streams to our company.

In the future, that might mean consumers will buy energy from the same company that provides them their Internet service. Or it might mean that their Internet provider sells them energy. Or it just might mean Microsoft takes us all out of the business. But even through all that, maybe even buy it through your local supply store.

For the residential market, there is another intriguing opportunity. Because of the Internet and the grocery store, the only two places we actually go to buy anything anymore, they open up whole new opportunities, whether Amazon.com puts one more page in their web and forms an alliance with Dynegy is one option.

Similarly, Proctor & Gamble could become a competitor, packaging power in different boxes, a green box, a coal box, and a cheap box, and put it on a grocer's shelves.

Those are the types of options that deregulation allows us to think about. We see these possibilities. That is why we are committed to working with our customers establishing a business relationship and developing a quality of service that lowers their total bill.

We can do it in a number of ways. We have done it without technology. We have done it more on a customer service level. For example, we help customers choose the most efficient fuel source, whether it is natural gas or electricity.

We allow them to weigh the advantages of onsite generation, which many hospitals are considering. And we help them find new efficiencies in transmission distribution metering.

Mr. Chairman, that is the type of innovation you get in a deregulated market. In our experience, that innovation works best when it is left alone.

You cannot mandate a company to be creative. All you can do is give us the freedom to create these market opportunities and we will show up.

Does that mean we are out of time?

Mr. SHIMKUS. We are not real hard core. I mean, if you have got one or two more——

Mr. PERRY. One page.

Mr. SHIMKUS. Again, just summarize real quickly if you have another point you want to make.

Mr. PERRY. We need a little bit of help on the Federal level in a couple of areas.

One is in FERC's rulemaking. They need to be open to market-based alternatives rather than cost-based alternatives. For example, in our energy imbalancing. We are working with that in Montana.

A second is net metering of customer-sited generation so that we have more distributed generation in the grid. Because local utilities

tend to oppose that. And so a Federal mandate allowing that power to flow back in would be helpful.

And third is connectivity. Chairman Hecker from the FERC addressed this in an earlier hearing, the idea being that the grid has to be a grid and it has to be nationwide. It cannot be regional. Those are three recommendations that we make. Thank you.

[The prepared statement of Ronald L. Perry follows:]

PREPARED STATEMENT OF RONALD L. PERRY, PRESIDENT, COMMERCIAL ENERGY OF MONTANA, INC.

I. THE FUTURE OF ENERGY DEREGULATION

Montana is the first "low-cost of power" state to deregulate in the country. My discussion will focus on how Montana might serve as a beacon of both the successes and potential pitfalls of competition. Based on that experience, we see three critical strategies that will evolve as electricity deregulates:

- A. Market Segmentation
- B. Product Integration
- C. Quality of Service

A. MARKET SEGMENTATION

It is unlikely to see the large energy players in all markets, whether defined as geographic areas or types of users. Their cost of sales is simply too high to justify the effort. But we will see niche players created to satisfy any unmet needs. By definition, that is how entrepreneurial companies are created, by solving some need either unseen or ignored by a company with the resources to address the issue. Deregulation will create many new jobs as people see the opportunity of a \$500 billion industry opening to customer choice. We offer Montana as a good example.

1. User Segments

In Montana, just like nationally, electricity consumption is divisible about 40/40/20 between industrial users, residential users, and commercial businesses.

- *Industrial users* benefit from aggressive pricing from four regional suppliers (Illinova, Enron, Idaho Power, & Avista). These users rely almost completely on price in making their decisions and exhibit little brand loyalty, typically bidding one year contracts.
- *Residential users* have little knowledge of the process, lots of questions, and very small consumption. The potential gross profit for such an account might be only \$40 per year. No significant inroads have been made by any marketer to date in Montana.
- *Commercial users* are the smallest niche, but with the average customer using 2,500 megawatts per year, (about \$70,000 for the power each year) and an average gross margin of \$1.00 per megawatt, a direct sales effort is cost justified. In Montana, two companies compete for this segment, with CE owning the lion's share at this time.

2. Geographic Segments

Half of this country lives in rural America. However, big business does its work in the forty largest metropolitan areas. As we have seen in California, Georgia, Pennsylvania and the rest of the east coast, there is no lack of competitive activity in the urban areas. In Montana, we do not have twenty marketers on television, radio, and on the telephone espousing their virtues. But business might be done a little differently in these rural areas, where a personal relationship is far more important than the cheapest price on a fax machine. Allstate sells homeowners insurance in these areas through its neighborhood office program, Edward Jones sells its brokerage services in a similar manner, and it wasn't that long ago that Wal-Mart only existed in these very same towns.

B. PRODUCT INTEGRATION

Commercial Energy's business model is premised on building a solid customer relationship. The question becomes how deep can we grow that relationship? Alternatively, does the initial customer relationship have to come from an energy background, or can it simply be based on trust and years of experience with a given vendor?

1. Business Segment

Commercial Energy first created a natural gas supply relationship, and leveraged it to include electricity. A small market such as Montana requires this growth to extract as many relevant revenue streams as possible to justify the cost of a direct sales and marketing effort. It may be possible for us to cost-effectively provide long distance and internet services to these same customers. But there are also corollaries: A company with a pre-existing business relationship, such as its internet service, could leverage back to energy. If Microsoft, with its strong emphasis on corporate customers, decided to pursue energy, what or who could impede its progress? And that avenue has virtually no geographic impediment. By the same token, small businesses may find their local business supply store, aka Staples or Office Max, a more than eager supplier.

2. Residential Segment

So if we speak of the customer relationship, we must glance at the residential user. They have two consistent shopping venues: The grocery store and the internet. The internet is almost too easy: Amazon.com simply adds electricity to its books and videos. It creates a relationship with a large trading house like Enron and captures a portion of the market, and probably the portion that is the most likely to buy competitive energy early. On the other hand, Procter and Gamble can be a formidable competitor, and if they decided to package green power, next to coal power, next to cheap power on your grocer's shelf, you have another simple channel to reach the customer.

C. QUALITY OF SERVICE

At Commercial Energy, we believe that the Quality of Service will become the beacon that our customers judge us by, not our price. In Montana, we are seeing companies offering just energy consulting services while owning no energy, suppliers wanting to just wholesale their power to the retail marketer, and energy managers like Commercial Energy, that offer both. To us, Quality of Service is all about that commitment to lowering the Total Energy Bill. But there may be many iterations of this concept, for instance:

1. BTU Management

By leveraging sales of both electricity and natural gas, suppliers can offer to assist customers in using the most cost-effective fuel source. To be truly effective, some will go as far as to assist customers in lowering overall consumption through performance contracting. In this manner, deregulation will actually foster energy efficiencies and conservation, by using the market as the price signal. One of the unfortunate implications of bundled utility service is that it has in the past encouraged uneconomic usage by not sending the right price signals to customers. Detailed bills put that information in a customer's hands, and the rational ones will act on it.

2. Customer Sited Power Generation

Detailed bills also provide a customer and his supplier with the information needed to decide if making power on-site is a preferred alternative to purchasing off the grid. We fully expect to see a revolution in on-site generation. When a customer pays \$0.05/kilowatt in a competitive environment, but can buy the engine, the fuel to run it, and maintain it all for less than \$0.04/kilowatt, that customer will make the investment. We are seeing our rural hospitals evaluate this option as a viable means of gaining a return on their investment in backup systems mandated by state and federal laws. From a national perspective, this redundancy of generation can diminish our reliance on the grid and system-to-system interconnects over the coming decade.

3. Utility Cost Management

In rural areas like Montana, regulated Utility services (transmission, distribution, demand, and metering) comprise from 50% to 60% of the business customer's total bill. Ultimately, saving a customer a nickel on the utility side of the bill is far better than beating a competitor by a penny on the commodity. Commercial Energy creates services designed to fulfill this commitment of a lower Total Bill.

4. Local Aggregators

In Montana, the Montana Hospital Association (MHA), the League of Cities and the Montana School Board Association have attempted to aggregate their members to competitively purchase electricity. As someone who grew up in southern California and worked in Miami, Chicago, New Orleans, and Orlando, I can say that people are far closer to their local governments here than in urban states, and this may offer some help of market alternatives for the residential customer. Let the gov-

ernment that is closest to the people develop market alternatives. They may best serve the will of the people. Montana has also passed a law allowing non-profit aggregators, such as our local Electricity Co-operatives, to be considered for the supplier of last resort function. This alternative has happened fully three years ahead of mandatory residential deregulation. All of these aggregators have the choice of buying on a more or less wholesale level from the national competitors.

II. BARRIERS TO INNOVATION AND WORKABLE COMPETITION

Innovation works best when it is left on its own. Creativity simply happens, it cannot be mandated. To date, the States appear to be learning from each other as they proceed to deregulation. We support the notion that any federal legislation should respect the laws of states that have enacted deregulation prior to the federal. But federal legislation can and should take a leadership role in promoting electricity deregulation to those states that may be slow to evolve. States should not be allowed to get in the way of their constituents because of unfounded fears that competition will not appear or protectionist attitude towards their incumbent utilities. The record in Montana is clear. Even rural states will benefit from deregulation. But there are issues that deserve consideration on a national level:

A. COST-BASED FERC RULEMAKING

The FERC must be encouraged to be more open to alternate methods of facilitating competition. One example is the Energy Imbalance service whereby we settle each month on the relative over and under supply of power by marketer. By keeping this process simple allows new entrants, such as the local aggregators, to join the market without an overwhelming learning curve. To date, the FERC has stuck by its historical approach of cost-based ratemaking rather than allowing the market to creatively solve the problem. Montana Power has proposed settling these imbalances through a Cash-Out at the published daily rate. It is public, administratively simple, and fair. This is the type of situation where an administrative agency should pull back and let a state experiment. If it fails, there are at least forty other states to try something different. I remind Congress that the administrative body that is closest to the people being regulated may well be the most effective (or credible) body to impose rules.

B. LACK OF NET METERING OF CUSTOMER-SITED GENERATION

Over twenty states already have laws allowing net metering of solar or wind powered generators of less than 50 kilowatts. Local utilities typically oppose anything greater as it potentially diminishes their revenue recoveries. National legislation requiring that all electric utilities allow customer-sited generation of up to one megawatt of natural gas fired generation would give real encouragement to the growth of sited generation. Local PSC's would provide access for the end user to sell any reasonable unused capacity back to the customer's marketer for redistribution without any additional transmission charges (probably within the citygate). Not only would this encourage development of distributed generation, it would also minimize our reliance on the national power grid.

C. LACK OF REGIONAL CONNECTIVITY

In Montana, we can only take electricity from the west and south, which limits are purchasing opportunities to about six generators. It also limits are ability to arbitrage power from other regions, or to take our power in lower priced months to other regions. An effectively competitive supply situation requires that markets not be artificially constrained. To Montana's north, no connections exist directly to Alberta. To the east, we are hamstrung by the NERC's DC Interconnect, a vestige of the MAPP regional system tie to the WSCC region. The frequency synchronization is a problem that prevents volumes from flowing in marketable segments of less than 25 Megawatts. Intra-region reliability is important, but the federal government should be creating national connectivity, which creates a level playing field for all regions. The benefits are numerous. Building additional infrastructure would (1) facilitate our exportation of power to Canada (Alberta deregulates January 1, 2001), (2) provide lower priced power to rural Montana, (3) help in exporting Bonneville Power's cheap hydropower to eastern states, and (4) increase competition amongst generators for more workable competition.

D. GROWING OLIGOPOLY POWER

Customers want choice because that leads to better service. However, as utilities have sold their generating assets, we are seeing a greater concentration of capacity in fewer hands. This may be cause for concern as these asset sales continue. Of greater concern to Commercial Energy are the attempts by the largest wholesalers

of power to impose overly stringent credit requirements on customers and marketers. Curiously, these requirements are almost identical from one to another. One would expect a competitive market to develop competitive alternatives, especially companies so astute at managing risk. We have antitrust legislation in place, but it is not practical for a small company to fight a \$1 billion plus marketer in federal court. Congress should make its intent clear that collusive practices will not be tolerated. Banks lending policies are scrutinized by regulators, which has insured the stability of our banking system for sixty years. Possibly the Congress, through FERC or the Department of Justice, should assume a similar responsibility for oversight of the fairness of credit evaluations by the national marketers of the niche players.

E. FEDERAL POWER SALES TO SMALL BUSINESSES

As the current owners of the federal power systems at BPA and TVA, the federal government has the ability to encourage sales of power by these entities to deserving small businesses. Commercial Energy is a certified HUBZone Empowerment Contractor, yet it is not encouraged to buy from the Bonneville Power Administration. To date, BPA has used even stricter credit standards than Enron Capital & Trade. It seems odd that a federal agency that gives preference to SBA vendors when it is buying goods and services cannot do the same when it is selling goods and services to SBA vendors. Using these federal assets in such a manner would be a great encouragement to the development of the small markets in the surrounding areas, whether that be Montana or Tennessee. When these systems are privatized, using the proceeds from the sale to pay for the costs of increasing the connectivity between the NERC Reliability regions suggested above is another means of enhancing competitive alternatives.

F. STANDARDIZED LICENSING REQUIREMENTS

We have seen our national competitors support standardized licensing requirements of electricity marketers as a means to ease their entry into disparate states. On the surface, a template of licensing procedures might be helpful to states. However, one of the risks of such an approach is that it may stifle the entrepreneurial companies that will emerge precisely because the process is unique state-by-state. That uniqueness deters the national competitors from establishing an early retail presence in a deregulating state, and instead forces them to concentrate on their wholesale opportunities. By leaving this flexibility with the states, we encourage the development of indigenous marketers, rather than a drain of cash to Houston. Federal legislation should set limits on how onerous the licensing requirements can be on marketers, but not set minimums. The goal must always be to develop workable competition, not perfect competition.

SUMMARY

Adam Smith advised us over two centuries ago to trust in the invisible hand of the marketplace. That invisible hand has served us well. The state legislatures are on the right track. Solutions are being formulated, jobs have been created, customers are receiving better service, and it works in places like Montana, where few thought it could.

We at Commercial Energy of Montana are honored to have this opportunity to present our thoughts on the opportunities before us and the nation. If we can offer the committee any further details or data, please do not hesitate to ask.

Mr. SHIMKUS. Thank you very much, Mr. Perry.

Now we will move to Mr. Gary Mittleman, President and CEO of Plug Power from Latham, New York.

Welcome.

STATEMENT OF GARY MITTLEMAN

Mr. MITTLEMAN. Thank you, Mr. Chairman, and members of the committee, for inviting me here today.

Fuel cells are going to change the world as we know it today. It is not a new technology. It is actually a very well-proven technology that has been used by NASA for decades. But now because of cost reductions this space-age technology can be made a reality right here on Earth.

What we are talking about is an energy machine, a box the size of a dishwasher that can go either in your basement or right outside our house, something that can have a natural gas line or a propane line going into one side and enough electricity to power your whole house come out the other side.

Because we are not using conventional means of making this electricity—it is not combustion; it is electrochemical—it does it in a highly environmentally friendly way, a very efficient way, and in a way that will save consumers money.

I would be remiss at this point if I did not thank Congress for funding both the Department of Energy and the National Institute of Standards and Technology for the programs that they have undertaken in helping all of these distributed generation technologies become a reality.

A few words about Plug Power. We started 2 years ago with 22 people. We are now the Nation's largest fuel cell company employing over 260 people.

Our backers include Detroit Edison, Mechanical Technologies, Inc., Southern California Gas Company, and General Electric. Together with General Electric we will be distributing our product on a global basis.

We are well on our way to making this real. A year ago we set up the first house using a fuel cell and we have been running this fuel cell completely independent from the grid, proving that this technology really does work.

Fuel cells, in a lot of ways, are something like personal computers. It is a form of distributed generation and, just like personal computers did not replace the large mainframe computers, we do not believe that fuel cells will replace central station plants and the grid as we know it today.

But we do think they are going to dramatically change the landscape.

Just recently, and in fact we have heard again today about the severe heat waves that have hit the Northeast causing rolling blackouts and brownouts. The answer to solving these problems is not building more large central-station generating plants.

It is not building more transmission and distribution towers. The answer lies with distributed generation. It lies with things like fuel cells that can help solve the problems as we go forward.

What makes the fuel cell so exciting to us is several factors. One is its efficiency. On producing straight electricity it is about as efficient as anything else out there. It will produce at a 40 percent efficiency rate. But a fuel cell, because it is in the house, we can capture the waste heat coming off the fuel cell and we can use that to help heat the home in the wintertime and produce hot water.

When we do this, we are looking at efficiencies that will rival 80 and 90 percent.

Fuel cells will also greatly improve the reliability of electricity as we know it. Weather outages, whether they be from ice storms, lightening strikes, heat waves, that can take down power lines, that is not going to happen with the fuel cell in someone's house.

Perhaps best of all, fuel cells are environmentally friendly. We are looking at a device that could make smog and acid rain a thing of the past. When it comes to carbon dioxide or greenhouse gases,

because of the higher efficiencies of fuel cells, we are looking at something that can cut the amount of greenhouse gases by one-half. And for the customer, we are looking at savings of up to 20 percent.

Mr. Chairman, to truly open our energy markets and give customers a real choice, we need to break down some of the barriers that exist today.

These barriers, such as interconnection and disconnect charges, could stop not only fuel cells but all forms of distributed generation right in their tracks.

What we suggest is that we work together with our national labs and have a test bed of fuel cells across the country. We are talking about hundreds of fuel cells that customers and public service commissions alike can see, they can understand, and we can get to first-hand experience what the advantages, and what some of the issues will be in deploying this new form of distributed generation.

Plug Power has a vision. It is environmentally friendly. It is more reliable than the grid. It installs easily. It uses commonly available fuels. We are not talking about hydrogen. We are talking about natural gas or propane. And it is going to save the consumers money.

Our partners have committed over \$100 million to make this real, and it is becoming real faster than we know. If you have a minute after the hearing, I would love you to be able to take a look at the demonstration unit on my right that we brought with us.

Mr. Chairman, again I thank you for the invitation and the opportunity to share our views on competition.

[The prepared statement of Gary Mittleman follows:]

PREPARED STATEMENT OF GARY MITTLEMAN, PRESIDENT AND CEO, PLUG POWER

Mr. Chairman and Members of the Committee, thank you for inviting me here today. I would like to tell you about progress in residential fuel-cell technology and the benefits that it could provide for our nation.

A fuel cell is an "energy machine" for the home or small business—an on-site, distributed power generation device that produces electricity through an electrochemical process, rather than through combustion. The core of this process converts hydrogen—extracted from a fuel such as natural gas, propane, or gasoline—and oxygen into electricity with significantly lower emissions than those from even the cleanest fuel-combustion processes. Thanks to breakthroughs in fuel-cell technology, what was once only affordable for the space program is now within reach of the typical homeowner.

I would be remiss if at this point I did not thank the Congress for funding the Department of Energy and the National Institute of Standards & Technology programs that have made breakthroughs in this technology possible.

Plug Power is the United States' largest developer of proton exchange membrane fuel cells. Our company was created in June of 1997 with 22 people as a joint venture between DTE Energy, parent of the electric utility Detroit Edison, and Mechanical Technology Inc. Today, Plug Power employs 260 people and our partners now also include General Electric Power Systems and Southern California Gas Company. We believe the first mass market for fuel cells will be residential and small-business power generation and are focusing our efforts on commercializing small-scale stationary systems. Through General Electric—our distribution partner—we plan to sell residential fuel cells nationwide beginning in 2001.

Our first product will be about the size of a dishwasher, able to supply a typical-sized residence, or small business, with its complete electricity requirements. We're well on our way. In June of 1998, Plug Power unveiled a prototype fuel-cell system that for over a year now has been used to provide the electricity needs of a residence located in Albany, New York. This is the first home to be powered by a fuel cell independent of the grid.

We do not propose replacing traditional, centrally generated electricity with fuel cells. Rather, fuel cells will help to fulfill the needs for power as we become a more electronic society. Power plants and the grid will remain a part of our infrastructure. After all, cellular telephones have not eliminated traditional telephones, but they have changed the topology of the telephone network, making it vastly more user-friendly, pervasive and a driver of productivity.

Fuel cells can do the same for power. They can dramatically change the old paradigm of centrally generated electricity by giving consumers clean, dependable electricity independent of grid constraints. Just in the last two weeks, we've seen record-breaking heat waves in the New York metro area that have stressed our electric utility infrastructure. This has caused blackouts and rolling brownouts, as power companies have not been able to keep up with the demand for power. Is the answer to build more large, costly power plants and transmission systems? We do not believe so. Rather, we think the answer lies in the use of innovative distributed technologies, like fuel cells, where such problems can be virtually eliminated.

Residential fuel cells possess a number of benefits. First of all they're efficient. Our initial commercial units will operate on natural gas or propane, and are expected to achieve 40% electrical efficiency. When excess heat generated by the fuel cell is captured and used for hot water or heating, overall efficiency can exceed 80% and even 90%.

Another advantage is reliability. On-site power from a fuel cell offers reliable power generation that is not affected by weather-related outages. Fuel cells contain no moving parts, rendering the system both easy to maintain and relatively noiseless.

And perhaps the most compelling benefit of this technology has to do with the air we breathe. Fuel cells can significantly contribute to the abatement of environmental effects from combustion-based power generation by reducing emissions to near zero. Smog-causing particulate matter and other pollutants—such as acid rain produced by nitrous oxide and sulfur dioxide—can become a thing of the past. Carbon dioxide, more often called “greenhouse gas,” can be reduced by half when the fuel cell is designed to capture waste heat.

Add to all these benefits that of economy. Fuel cells cost less to operate—in many cases, offering 20-percent cost savings over grid-supplied electricity.

Mr. Chairman, in this era of deregulated, open energy markets, competition and consumer choice are the arbiters of the market. But to truly open our energy markets and give consumers *real* choice, we need to break down some of the barriers that still exist. From interconnection standards to stand-by fees and exit charges, consumers are faced with barriers that can keep fuel cells out of the marketplace. A national standard on interconnection would go a long way towards leveling the playing field so that innovative technologies, such as fuel cells, can bring true consumer choice.

How can we move ahead? Our national labs could serve as an important test bed for the deployment of innovative technologies. Working in concert with our national labs across the country, we would like to site several hundred units in the field to gain real experience in working with state public utility commissions to address consumer benefits, system standards and interconnection issues. Through this type of test-and-evaluation plan, we could accelerate the adoption of this technology and gain real experience in addressing the issues that confront distributed generation on a national level.

The Plug Power product vision is an environmentally friendly fuel cell, more reliable than the grid, that installs easily, uses readily available fuels, saves consumers money, powers the whole house and is the size of a dishwasher. Our partners have committed over \$100 million to accomplishing this vision. The vision is becoming very real, very quickly. If you have a minute after the hearing, I invite you to take a look at a Plug Power 7000 demonstration system. Field trials with these alpha test units will begin this fall.

Mr. Chairman, thank you for the invitation and the opportunity to share our views on innovation and competition within our energy markets.

Mr. SHIMKUS. Next is Mr. Ken Randolph, Senior Vice President and General Counsel of Dynegy, Incorporated, and I will say, as we talked earlier, welcome to Illinois and I hope you provide me as good a service as Illinois Power once did. You are recognized for 5 minutes.

STATEMENT OF KENNETH E. RANDOLPH

Mr. RANDOLPH. Good morning, Mr. Chairman, and members of the committee. By the way, we are delighted to be in Illinois and continuing to operate Illinois Power once we consummate the merger at the end of the year in the first quarter.

Dynegy is one of the country's leading marketers of energy products and services, and we commend this committee for your efforts in examining whether Federal legislation is needed in order to facilitate the realization of the anticipated \$20-plus-billion of customer savings expected from electric deregulation.

We think this suggests everyone ought to keep their eye on that ball because that is really what it is all about.

In Dynegy's view, establishing a competitive market without regulatory burdens and cross-subsidies is the best way to both maximize customer savings and enhance reliability.

Mr. Chairman, Dynegy believes that there are at least five distinct benefits that customers realize from electric restructuring.

One, extending existing wholesale power sales and price risk management services to industrial and large commercial customers who can become more competitive in world markets.

Two, providing low-cost power to residential and small commercial customers via sales to aggregators or retail alliances.

Three, building new, efficient, and environmentally friendly gas-fired merchant power plants to meet base, intermediate, and peaking loads. Competitive power producers are building and developing more than half of the 92,000 megawatts of announced merchant capacity that will be built by 2003.

For example, last month Dynegy brought on line, following an unprecedented 5-month construction timetable, a 250 megawatt gas-fired peaking plant outside of Chicago, and we are developing gas-fired power plants in North Carolina, Georgia, Kentucky, and Louisiana.

We probably hope that we, or wish that we had that 250 megawatts on line in the Northeast. We could have helped meet some of that demand. But you will notice we are not having the same situation in the Midwest this year.

In addition to providing clean, low-cost power, these new merchant plants will enhance the reliability of the transmission grid by acting as a surrogate for increased transmission capacity and will do so without creating a new generation of potential stranded capital costs.

Four, we are acquiring generation divested by regulated utilities optimizing its use and making it more efficient.

Five, there will be a whole host of other services that will benefit consumers as a result of electric deregulation and restructuring, and that will be covered by the other panelists today.

As you know, retail electric restructuring is proceeding rapidly. Over 20 States are already done. However, in order to maximize customer savings from electric restructuring, which I think is the goal to keep in mind, we believe that Congress should take bold action in three areas:

First, and bear with me on this one, we still believe Congress should establish a date certain such as January 1, 2002, for all States to implement retail customer choice. A national deadline

will avoid regional market distortions and maximize customer savings nationally.

Second, we believe that Congress should provide incentives for utilities to divest generation and provide FERC with authority to order divestiture of generation assets to mitigate market power and any stranded-cost claims.

The market has demonstrated that the single biggest factor in reducing so-called "stranded costs" has been the decision by utilities, either by their own volition or as a result of State electric restructuring laws, to divest generation. In addition to minimizing stranded costs, divestiture of generation mitigates utility vertical market power and helps to mitigate utility marketing affiliate issues.

Third, we believe Congress should repeal PUCA and repeal PURPA prospectively. These laws have simply outlived their usefulness. Repealing PUCA will facilitate additional utility merger and acquisition activity, which will allow for billions of dollars of costs and inefficiencies to be squeezed out of the system quicker.

Prospective repeal of PURPA, including eliminations of the restrictions on utility ownership of QFs and EWGs will expedite and enhance the voluntary renegotiation of those high-priced, above-market contracts, and we have done some of that. And it can be done in a way which will save millions for consumers and not adversely impact QF owners and lenders.

However, if a date certain and incentives for divestiture are not in the cards, then Dynegy would recommend that Congress pass a limited bill now eliminating PUCA and PURPA, allow the States and the markets to proceed for the next 18 months and come back in 2001 and examine the need for a comprehensive bill.

We believe that the last thing that we need in this market is additional mandates or cross-subsidies for things like renewable mandates and so forth that would simply add costs to the system and dilute the benefits.

Thank you again for allowing me to testify today.

[The prepared statement of Kenneth E. Randolph follows:]

PREPARED STATEMENT OF KENNETH E. RANDOLPH, SENIOR VICE PRESIDENT AND
GENERAL COUNSEL, DYNEGY INC.

Good morning, Mr. Chairman and Members of the Committee, my name is Ken Randolph and I am Senior Vice President and General Counsel of Dynegy Inc. Dynegy is one of the country's leading marketers of energy products and services. Through its leadership position in natural gas gathering, gas processing, transportation, independent power generation and marketing of energy, Dynegy provides energy solutions to our customers in North America and the United Kingdom. Dynegy is one of the leading examples of a company working with its customers to capture the opportunities created by electric deregulation and the energy convergence trend. Most recently, on June 14, 1999, Dynegy announced the execution of definitive agreements for the merger of Dynegy and Illinova, the parent company of Illinois Power, an electric and gas utility that serves approximately 650,000 customers over a 15,000 square mile area of Illinois. The merger will create a \$7.5 billion company, which is expected to own and/or control more than 15,000 megawatts of gross domestic generating capacity, average North American natural gas sales of 9.1 billion cubic feet per day and serve more than 950,000 retail customers. Subject to regulatory approvals, the merger is expected to close late in 1999 or in the first quarter of 2000.

Dynegy commends this Committee for its efforts in gathering information and attempting to determine the extent to which federal legislation is needed to facilitate the realization of the anticipated \$20+ billion per year of customer savings expected

from electric restructuring while enhancing the reliability of the electric grid. In Dynegy's view, establishing a competitive market *without regulatory burdens and cross subsidies* is the best way to both maximize customer savings and enhance reliability. Mr. Chairman, Dynegy believes there are at least five distinct benefits that consumers will realize only if providers are allowed to compete. These include:

- Extending existing wholesale power sales and price risk management services to industrial and large commercial customers.
- Providing low cost power to residential and small commercial customers via sales to aggregators or retail alliances.
- Building new efficient and environmentally friendly gas-fired merchant power plants to meet base, intermediate and peak loads. For example, last month, Dynegy brought on line (following an unprecedented five month construction timetable) a 250 MW gas-fired peaking plant outside Chicago and is developing gas-fired power plants in North Carolina, Georgia, Kentucky and Louisiana. Competitive power producers are developing more than half of the 92,000 MW of announced merchant capacity to be built by 2003. In addition to providing clean low cost power, these new merchant plants will enhance the reliability of the transmission grid by acting as a surrogate for increased transmission capacity and do so without creating a new generation of potential stranded capital costs.
- Acquiring generation divested by regulated utilities, optimizing its use and making it more efficient.
- Providing a whole host of other services that will benefit consumers. For example, providers will offer services to encourage greater energy efficiency. In order to give consumers even greater control over costs providers may also offer hourly pricing programs that will encourage use during off-peak hours or evaluate the possible installation of distributed generation.

As you know, retail electric restructuring is proceeding rapidly in the states with over 20 states having adopted customer choice, most of which will be fully effective on or before January 1, 2002. However, there is a critical missing link B development of a robust, liquid wholesale power market. Dynegy believes that federal electric restructuring legislation could enhance the development of both retail and wholesale power markets, and in so doing, maximize savings for customers resulting from competition. Mr. Chairman, to accomplish this goal the Congress must take bold action in three areas.

- First, it must ESTABLISH A DATE CERTAIN for all states to implement retail customer choice. A national deadline will avoid regional market distortions and maximize consumer cost savings nationally. Dynegy believes a January 1, 2002 nationwide deadline provides the appropriate balancing of national and state interests.
- Second, it must provide incentives for utilities to DIVEST GENERATION and provide FERC with authority to order divestiture of generation assets to mitigate market power and stranded cost claims. The market has demonstrated that the single biggest factor in reducing so-called stranded costs has been the decision by utilities (either on their own volition or as a result of state electric restructuring laws) to divest generation. Contrary to claims previously made by utilities, these generation assets have brought premium prices, in some cases more than double book value—and Dynegy has bought some of the divested generation assets. In addition to minimizing stranded costs, divestiture of generation mitigates utility vertical market power, and helps to mitigate utility marketing affiliate issues.
- Third, it must REPEAL PUHCA AND REPEAL PURPA, PROSPECTIVELY. These laws have outlived their usefulness. Repealing PUHCA will facilitate additional utility merger and acquisition activity, allowing for billions of dollars of costs and inefficiencies to be squeezed out of the system quicker. State PUCs can then do what they do best which is allocating the savings delivered by competition between ratepayers and utility shareholders. Prospective repeal of PUHCA (including the elimination of restrictions on utility ownership of QFs and EWGs) will expedite and enhance the voluntary renegotiation and restructuring of high priced above market power sales agreements to better reflect current market realities. Based on experience, the competitive market can provide opportunities to renegotiate and restructure these contracts in a way which will save millions for consumers without adversely impacting QF owners and lenders.

If a Date Certain and Incentives for Divestiture of Utility Owned Generation are not going to be part of Federal Electric Restructuring legislation, then Dynegy suggests that this Congress pass a limited bill repealing PUHCA and PURPA *now*,

allow the states and the market to proceed for the next 18 months, and re-examine the need for federal electric restructuring legislation in 2001. What the competitive market and consumers *don't* need in federal electric restructuring legislation are renewable mandates which would be paid for by consumers and models show would come at the expense of clean-burning, efficient natural gas fired generation. The competitive market and consumers also *don't* need to have federal electric restructuring legislation used as a backdoor vehicle to implement the Kyoto treaty or otherwise to divert consumer savings from electric restructuring to pay for greenhouse gas reductions or for social programs. The future of the electric power industry has never been brighter and Dynegy encourages Congress to remove the barriers that exist today to achieving the savings that can be delivered by the competitive market and to avoid calls for cross subsidies or the creation of new barriers that will interfere with or dilute the benefits of competition.

Mr. SHIMKUS. Thank you.

Next we have Maj. Gen. Ed Philbin, Executive Director of Media Fusion Corporation. Welcome, and you are recognized for 5 minutes.

STATEMENT OF EDWARD J. PHILBIN

Mr. PHILBIN. Thank you, Mr. Chairman, members of the subcommittee, as the designated Executive Director of the proposed field test activities of Media Fusion Technology at the Stennis Space Center in Mississippi. I am here to inform you of the new and innovative services that the corporation plans to provide by its revolutionary technology.

In light of my past regulatory experience as Chairman and Commissioner of the Interstate Commerce Commission, and as Acting Chairman and Commissioner of the Federal Maritime Commission, I will also offer my views on the possible barriers which would prevent these services from being offered to consumers.

There have been many attempts to utilize the electric power grid for the transmission of communications signals, all of which have met with little or no success. All of these attempts have utilized the alternating current within power lines as a signal carrier.

Media Fusion utilizes the magnetic sheath around the power line created by the alternating current within the power line as the signal carrier. This technique overcomes the obstacles encountered in the past by others.

Since much of this data is proprietary and is in the patent process, I will say no more about it. However, I will mention many of the services that will accrue to customers and utilities when this technology using the electric power grid for communications transmission is perfected.

It is called Advanced Subcarrier Modulation Technology and it offers data, video, and voice transmission over the power grid at faster than 2.5 gigabits per second with guaranteed authentication of the user's identity.

Media Fusion believes it is the only organization to have solved the problems of access to homes, limited bandwidth, and prohibitive capital costs.

The corporation is currently in the process of negotiating relationships with electric utilities, telecommunications companies, cable companies, information subscriber organizations, and technology manufacturers.

All applications may be licensed to competing markets equally. Although content providers may compete in their current formats,

all share the need for reliable and verifiable security programs and all stand to benefit from the use of the Media Fusion pipeline.

This technology will provide highspeed information networks for rural areas, elementary schools, and developing nations; improve grid management, enabling electric utilities to predict material failures causing brownouts or worse; and provide secure financial transactions and e-commerce of all kinds.

This technology will make possible real telecommunications deregulation and cheaper electrical services as utilities obtain more efficient means of managing their grids.

Media Fusion Technology will be an enhancement to the Internet, an unregulated market, the growth of which would have been stifled by regulation.

This technology is also the solution to the final mile. That is what the FCC calls it, and it is the final entry point into every home and business which marks the greatest barrier to competition in telecommunications because it is controlled by regulated companies and industries.

And finally, due to its speed and security, this technology will open the door to competition in a myriad of other industries.

Other applications will result from Media Fusion's extremely accurate electrical measurements. As the Media Fusion neural network can recognize the smallest changes in appliance electricity use in the home, the system can provide profiles of customer appliance use.

Collectively, these user portraits represent demographic and market trends.

And finally, the historic electrical industry's request for remote meter reading solution will be ended. Media Fusion can supply remarkably accurate customer kilowatt usage information to power companies for billing purposes.

In the United States, patents on powerline communications were first filed in the 1930's. Soon afterwards, the electrical and communications industries were isolated by regulation for economic reasons. Telephony and electricity grew up separately until divestiture and deregulation.

Since the 1996 Telecommunications Act spread deregulation of electrical utilities across the States, powerline communication has again become a topic of interest in the United States and Europe and the Far East.

Media Fusion's technology imbeds signals on the magnetic wave to offer a superior and less expensive solution for powerline communications.

Using the magnetic wave, Media Fusion's signals are insulated from transformer effects, and also offers higher bandwidth capacities enabling Media Fusion to offer more services of voice, video, and data over the same pipeline.

Even nonpowerline communications and data services have difficulty matching Media Fusion's capacity and low cost. Any assumption that Media Fusion is in competition with telephone or cable companies is incorrect.

Media Fusion offers a pipeline to any company that wishes to use it to optimize its network and reach more customers. The band-

width capacity of Media Fusion's pipeline can support as many content providers as wish to use the network.

Media Fusion will not only empower existing communications companies but also revolutionary new patents on components of the system from polymers to magnetics that will lend themselves to positive developments in many other industries.

Many startup companies with new technologies are concerned with premature regulation, and Media Fusion is no exception.

In a move to prevent misunderstanding among regulators of powerful communications firms that may wrongly perceive Media Fusion's technology as a threat, Media Fusion proactively seeks the support of Congress.

We have briefed numerous House and Senate committees to that effect.

As Media Fusion Powerline Communication technology does not apply to today's regulated categories, communications or energies, we realize the need to brief Federal and State communications energy regulatory authorities on this new technology.

To date, the company has been able to develop its technology free of any regulatory burdens. However, there is concern that regulatory uncertainty could undermine the ability of electric utilities and others to offer powerline communications generally—for example, by sending mixed signals to investors as to the feasibility of such deployments. The speculation is that there may be an attempt to subject Media Fusion to some degree of regulation, however light, by the Federal Communications Commission, as a competitive local exchange carrier when providing local telephone service and possible cable regulation when providing video service.

Mr. SHIMKUS. General, can I ask you to kind of summarize real quick the last page?

Mr. PHILBIN. Basically, my regulatory experience has been that the rule really should be that no regulation should be applied until there has been a problem identified as adverse to either the public interest or the public in general, and I would suggest that in this particular area—especially in light of this new developing technology—that the rubric should be applied. Don't fix it if it ain't broke.

[The prepared statement of Edward J. Philbin follows:]

PREPARED STATEMENT OF EDWARD PHILBIN, EXECUTIVE DIRECTOR, MEDIA FUSION TECHNOLOGIES

Good morning Mr. Chairman. I am Edward Philbin. As the designated Executive Director of the proposed field test activities of Media Fusion Technologies at the Stennis Space Center in Mississippi, I am here to inform you of the new and innovative services that the corporation believes will be provided by its revolutionary technology. In light of my past regulatory experience as Chairman and Commissioner of the Interstate Commerce Commission, now transformed into the Surface Transportation Board, and as Acting Chairman and Commissioner of the Federal Maritime Commission, I will also offer my views on the possible barriers which would prevent these services being offered to consumers.

There have been many attempts to utilize the electric power grid for the transmission of communication signals, all of which have met with little or no success. All of these attempts have utilized the AC current within powerlines as the signal carrier. Media Fusion utilizes the magnetic sheath around the power line created by the AC current within the power line as the signal carrier. This technique overcomes the obstacles intrinsic to using the AC current as the signal carrier. Since much of this data is proprietary and is in the patent process, I shall say no more about it; however, I will mention many of the services that will accrue to consumers

and utilities when this technology using the electric power grid for communications transmission is perfected. ASCM technology offers data, video and voice transmission over the power grid at faster than 2.5 Gbs with guaranteed authentication of the user's identity. Media Fusion believes it is the only organization to have solved the problems of access to homes, limited bandwidth, and prohibitive capital costs. The corporation is currently in the process of negotiating relationships with electric utilities, telecommunication companies, cable companies, information subscriber companies and technology manufacturers. All applications may be licensed to competing markets equally. Although, content providers may compete in their current formats, all share the need for reliable and verifiable security programs, and all stand to benefit from the use of the Media Fusion "pipeline."

This technology will provide high-speed information networks for rural areas, elementary schools and developing nations; improve grid management, enabling electric utilities to predict material failures causing brown-outs or worse; and provide secure financial transactions for banks, brokerage houses and e-commerce of all kinds. This technology will make possible real telecommunications deregulation and the costs of electrical services could drop as the utilities obtain more efficient means of managing their grids. Media Fusion technology will be an enhancement to the Internet, an unregulated market, the growth of which would have been stifled by regulation. This technology is also the solution to the "Final Mile", i.e., the final entry point into every home and business, which marks the greatest barrier to competition in telecommunications because it is controlled by regulated companies and industries. Finally, due to its speed and security, this technology will open the door to competition in a myriad of other industries.

Other applications will result from Media Fusion's extremely accurate electrical measurements. As the Media Fusion neural network can recognize the smallest changes in appliance electricity use in the home, the system can provide profiles of customer appliance use. Collectively these user portraits represent demographic and market trends. And, finally, the historic electric industry quest for a remote meter-reading solution will be ended. Media Fusion can supply remarkably accurate customer kilowatt usage information to the power companies for billing purposes.

In the United States, patents on power line communications were first filed in the 1930s. Soon afterwards, the electrical and communications industries were isolated by regulation for economic reasons. Telephony and electricity grew up separately until divestiture and deregulation. Since the 1996 Telecommunications Act, and the spreading deregulation of electrical utilities across the states, powerline communication has again become a topic of interest in the United States, in Europe and the Far East.

Media Fusion's technology embeds signals on the magnetic wave to offer a superior and less expensive solution to powerline communications. Using the magnetic wave, Media Fusion's signals are insulated from transformer effects and also offer higher bandwidth capacities enabling Media Fusion to offer more services—voice, video and data. Even non-powerline communications and data services have difficulty matching Media Fusion's capacity and low costs.

Any assumption that Media Fusion is in competition with telephone or cable companies is incorrect. Media Fusion offers a pipeline to any company that wishes to use it to optimize its network and reach more customers. The bandwidth capacity of Media Fusion's pipeline can support as many content providers as wish to use the network. Media Fusion will not only empower existing communications companies, but also revolutionary new patents and components of the system, from polymers to magnetics, will lend themselves to positive developments in many other industries. Many start-up companies with new technologies are concerned with premature regulation. Media Fusion is no exception. In a move to prevent misunderstanding among regulators or powerful communication firms that may wrongly perceive Media Fusion's technology as a threat, Media Fusion proactively seeks the support of Congress. The Corporation has presented positively received briefings to the House Science Committee and the Senate Commerce Committee.

As Media Fusion's power line communications technology doesn't apply to today's regulated categories -communications or energy—we realize the need to brief federal and state communications and energy regulatory authorities on this new technology.

To date, Media Fusion has been able to develop its technology free of any regulatory burdens; however, there is concern that regulatory uncertainty could undermine the ability of electric utilities and others to offer powerline communications generally, e.g., by sending mixed signals to investors as to the feasibility of such deployments.

Speculation is that there may be an attempt to subject Media Fusion to some degree of regulation, however light, by the FCC as a competitive local exchange carrier (CLEC) when providing local telephone service and possible cable regulation when

providing video service. But, forcing a new, revolutionary technology into an old regulatory mold merely because it bears some resemblance to an old, existing regulated technology makes very little sense. To do so is more likely to obstruct or to completely stifle full development of the technology rather than nurture it. The approach I urge is to impose no regulation on this new technology, which when perfected, will amount to a paradigm shift in telecommunications technology, unless and until it creates an identifiable problem adversely affecting the industry and/or the public. In short, I would apply the old rubric: *"If it ain't broke, don't fix it."*

The FCC and the states should expressly acknowledge that new technologies such as Media Fusion's are in the public interest and should be encouraged. Regulators must be careful not to burden new technologies with the regulatory baggage of ancient regimes. There are several "regulatory models" actively being applied to different industries, even as discrete industries and services begin to merge. As new technologies emerge, it is critically imperative that government refrain from requiring a particular regulatory classification so that technology and economics, rather than regulation, can guide the deployment of advanced services. Finally, the federal and state governments must be mindful of the incentives of incumbent providers and be prepared to act in the event they impede the competitive provision of advanced services such as those of Media Fusion.

I appreciate the invitation to appear before the Subcommittee and applaud its willingness to look beyond today's horizon to new participants in the advanced communications services market. Electric power line communications hold vast potential to provide these services to the public and serve the public interest. As a company dedicated to the development, installation and management of a low-cost infrastructure to provide reliable voice, data and video communications over the electrical power grid, Media Fusion welcomes the opportunity to play a leading role in the deployment of advanced data capabilities. To meet the pro-competitive goals of the 1996 Act, Congress should expressly find that such developments are in the public interest and refrain from imposing any unnecessary regulation that could impair the development of this new technology.

I will be pleased to answer as best I can any questions you may have.

Mr. SHIMKUS. Thank you very much.

I now turn to Mr. Tom Tribone, Executive Vice President of AES Corporation from Arlington, Virginia. Welcome, and you are recognized for 5 minutes.

STATEMENT OF THOMAS A. TRIBONE

Mr. TRIBONE. Thank you, Mr. Chairman and good morning.

We are proud also to be a new member of the community in Illinois, Mr. Chairman. We are the company that is in the process of merging with CILCO—

Mr. SHIMKUS. If you would, just pull that microphone a little bit closer to you and make sure that that switch is on. We are high-tech here, so it has to be fairly close.

Mr. TRIBONE. Okay. My name is Tom Tribone, Executive Vice President of AES Corporation.

As I was preparing my comments for today, my young daughters asked me what I was going to talk about. I could not help myself but to say "the amazing disappearing natural monopoly." Any of you who are still reading to your kids at night like we are will understand how those kinds of things just pop out once in awhile.

But this idea that the scope of the electricity monopoly is really quite small, and that free markets work has been a guiding principle of our work at AES since the beginning. It will be the central theme of my comments today.

I have given some background material on AES in my written statement and I will not try to cover it all now. Suffice it to say that we are I think the largest global power company. We are serving almost 100 million people in over 49 countries, and we have a

tremendous amount of experience in competitive markets both here at home and abroad.

We happen to think that private business can be a major force for positive change in the world, so we have designed our organization to try and do just that and to be enjoyable at the same time.

I am not going to talk about those aspects of our company in detail now because I would like to stick with the disappearing, or at least the quickly shrinking natural monopoly.

I have asked the experts in this field of regulation for a little history, and it turns out that in the early days of regulation it was correctly recognized that the provision of certain services was a natural monopoly and therefore had to be completely regulated. So electric, gas, railroads, telephone, all fell into that category.

Then what happened over time is that anything that had any connection with any of these regulated industries was included in the regulatory scheme also.

An example was that when the trucks began to compete with the railroads, the trucks were regulated too.

It seems that the turning point in this thinking was sometime in the 1970's when Alfred Kahn, who was then regulating in New York, was setting prices for those old black rotary telephones when he thought to ask the question. Why did the phone company have a monopoly on the production and sale of telephone sets?

You probably remember how clunky those old phones were. Your fingers would slip out when you tried to dial fast, and there just was not any choice. It was a monopoly, and that is what we had.

My friends in the UK tell me that the consumers over there had even a worse time because they, for their emergency number, instead of 911 like we have here, they had 999. You can imagine trying to dial in an emergency 999 fast with your fingers slipping out of one of these clunky old phones. But that was the state of play when Alfred Kahn first recognized that some of this natural monopoly thinking had to change.

So telecommunications of course—and we have heard a little bit here from the General—has made a lot of progress since the days of the black phones. In electricity we have made some progress, too. But really we are only starting.

Although a part of the electric sector has experienced free markets and competition for awhile, that part has been relatively small. Our company, AES, has always operated in this competitive sector of the market.

We did not have a protected monopoly base to start from, and we have grown from a startup to a \$20 billion enterprise today in this competitive sector.

I think our growth, in and of itself, is probably one of the strongest statements I can make today about how open markets will work in electricity.

At AES we have had experience with many different regulatory models around the world. The one thing that we see over and over is how in each new iteration of the restructuring of the industry the competitive, consumer-centric part grows and the monopoly regulated part gets smaller and smaller.

Here in the U.S. in the 1980's, when some competition was first introduced by PURPA to a small portion of the generating sector,

all of us were surprised at the creativity and innovation that occurred.

The scope of what we could do back then was quite limited by today's standards. Only about 2 percent of the sector was opening up to competition each year. But AES did manage to introduce a few new ideas then.

We became the biggest buyer of clean coal technology that could burn coal with 90 percent less sulfur and nitrogen oxide emissions. These emission levels are standard today, but back then it seemed pretty radical to almost everybody.

We were also the company that pioneered the idea of planting trees to offset the greenhouse gases produced by burning fossil fuels.

Other countries have now gone all the way to open and free competition in electricity, and they have completely restructured their electric sectors.

We have investments in many of these countries, and in every case we found the same thing. Free markets can and do work in electric. They are perfectly capable of setting prices and quality for electric services.

In fact, we have seen that in every case where markets have been open and deregulated, prices have fallen and service has improved.

In my written testimony, I gave an example of Argentina where prices fell by 50 percent, but that could just as well have been Australia or the UK.

Maybe to sum up, I can give you a thought to reflect on the next time you hear someone mention a phrase that represents one of the central sticking points in this whole debate during the transition in the electric sector, the so-called "obligation to serve."

Under the cost-plus regulatory system we have today, we often hear that utilities have this burdensome obligation to serve anyone who wants electricity. But to a company like us, AES, this apparent burden is a valuable privilege and we would pay to have it.

I hope you can see from my comments how for us thinking in terms of a market where a customer can vote and has choice it is transformed from an obligation to serve into what keeps a company like us going, the opportunity to serve.

Thank you.

[The prepared statement of Thomas A. Tribone follows:]

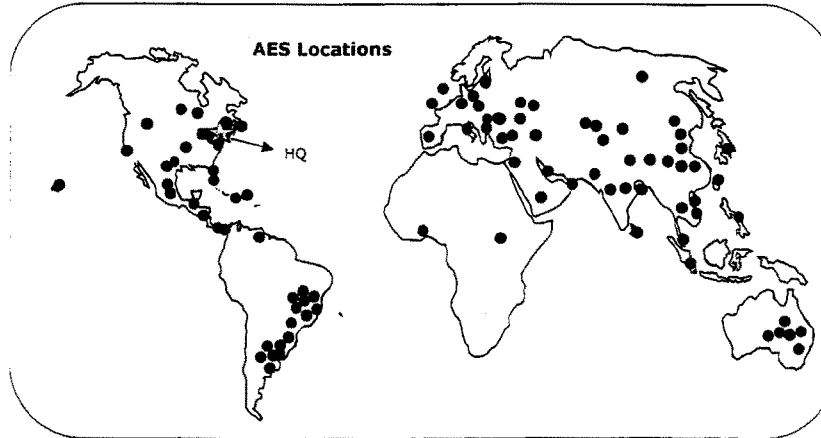
PREPARED STATEMENT OF THOMAS A. TRIBONE, EXECUTIVE VICE PRESIDENT, AES CORPORATION.

My name is Thomas A. Tribone and I am Executive Vice President of the AES Corporation. My company is headquartered here in the Washington D.C. area. We are one of the largest global power companies with over 30,000 megawatts of generating capacity, 14 million retail customers and 27,000 employees.

AES was started by Roger Sant and Dennis Bakke (both former energy officials in the Ford Administration) in late 1981. I have been working with Roger and Dennis since early 1982. We began as a non-utility generator developing Independent Power Plants in the United States and from our first power plants in Texas, Pennsylvania and California we have grown to a \$20 billion global company today. AES is working in over 49 countries, serving the electricity needs of over 100 million people. All of this growth has taken place in the competitive sector of the power industry here in the United States and abroad. We have seen the beneficial effects of introducing a competitive model in the electric sector over and over again as we work

to help meet the world's need for electricity. I plan to describe some of our experience for you in my testimony today.

The map below indicates where AES is doing business:



We believe that private business, operating in a free market environment, can be one of the major forces for improving the human condition in the world today. On a macro level commerce is, in the words of Michael Novak, "mysteriously knitting the people of the world together." At AES we are vividly reminded of our own small role in this process when we host a company event at our headquarters here in Arlington, Va. Those AES meetings look like the United Nations—people are here from all over the world, many in their native dress and, we're proud to say, all of them either already fluent in or earnestly learning English. In our last company-wide meeting we had people from at least the following countries present: Argentina, Australia, Bangladesh, Brazil, Canada, China, Dominican Republic, Kazakhstan, Georgia, Hungary, India, Korea, Mexico, Netherlands, Pakistan, Panama, Poland, Russia, Singapore, Sri Lanka, United Kingdom, United States, Uganda and the Ukraine.

On a less global, personal level we believe that business is a noble calling that should allow each person to experience the fulfillment that can only come from making a contribution to the world. To this end, AES has developed a set of principles that we aspire to live by and that guide our decision-making. We strive to act with integrity and fairness, conduct our business in a socially responsible manner and to have the most enjoyable and fun workplace ever. This latter aspiration has led us to a very decentralized organization in which our leaders give up decision making power to those closest to the decision. I've listed some of the characteristics of our organization in the following table:

AES Organizational Structure		
Flat	<i>not</i>	Hierarchical
Advice	<i>not</i>	Orders
Local Decisions	<i>not</i>	Centralized
Creative Individuals	<i>not</i>	"Laborers"
Open	<i>not</i>	Secretive

Ultimately, our hope is that our organization allows each individual to maximize his or her God-given ability to make their best contribution to the world.

Our growth in the 1980's took place exclusively in the United States. In those days the US electric sector had not really introduced much competitive reform but PURPA did create some space for competition for new generating capacity. We built new state-of-the-art power plants in several states, not only Texas, Pennsylvania and California but also Connecticut, Hawaii, Oklahoma. All of these early plants

sold their output to local electric utilities that operated under a regulated monopoly franchise.

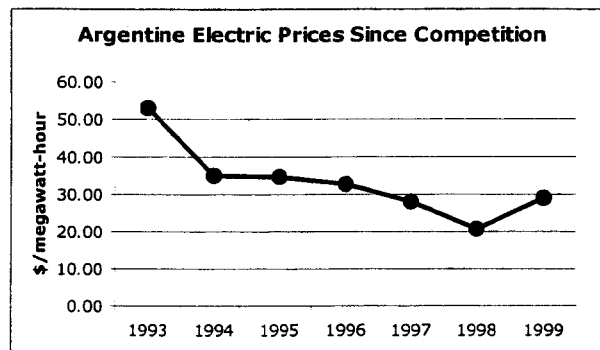
Looking back from where we are today, there was not much scope for creativity, innovation and customer choice in this early stage of reform. Customer preferences and open markets were not really under serious policy debate back then. But even the limited competition of this era allowed us to introduce several innovations to the market that, although taken for granted today, seemed fairly radical to others in the industry at the time. One example was our wide adoption of clean coal technology (with much lower sulfur dioxide and nitrous oxide emissions) for producing electricity; another was our idea to plant trees to offset the greenhouse gases produced by burning fossil fuels. In addition to the organizational, technical and environmental innovation I've mentioned, we pioneered several new commercial and financial structures that are standards in the industry today. In the 80's, however, the range of ideas that we could try we were quite limited by the industry's legal structure. I can remember feeling that we could unleash a lot more creativity in the industry if we could introduce a more market-driven, competitive and consumer-centric structure.

Much more change came in the late 1980's and into the 1990's. Our experiences up to that time in the United States had led us to the conclusion that there was a much more socially effective model for the provision of electricity. It seemed clear to us that most of what was a regulated monopoly industry would yield much better results for society as a whole if we could somehow give consumers of electricity a vote in what they bought and who they bought it from. Roughly speaking, it seemed to us that the only natural monopoly was the transmission and distribution system—this part of the industry must remain regulated (albeit under a new model). The rest of the electric sector's functions (again roughly speaking, the generation and marketing of electricity) could be best accomplished in a freely operating market where customers have choice. This basic industry model can be diagrammed as follows:



As these ideas were gaining some currency in policy circles several countries began to restructure their electric sectors along these lines. The most important first-movers in this regard were the United Kingdom and Chile. These basic elements were laid out in the UK in a 1989 white paper published by Margaret Thatcher's government. The white paper outlined a new competitive model for the electric sector and it drew upon many of the elements that had already been adopted earlier in the decade in the Chilean model. In the 1990's these ideas spread rapidly and many other countries have successfully reformed their electric sectors using this basic structure.

Our experience has been that where this new paradigm has been adopted electricity prices have fallen and quality of service has improved. As real life example we can look at the price of electricity in one of the most open and competitive markets—Argentina. As you can see from the graph below prices have fallen dramatically since the Argentine competitive model was adopted in 1992:



AES is a major participant in the Argentine market. We have been able to thrive there by offering customers better service at a lower price. We participate in all seg-

ments of the industry, including the delivery business. The electric delivery businesses that we have invested in are regulated under a new model that focuses on the price to the consumer, not cost. The Argentine government published a fixed schedule of yearly prices and then auctioned off the delivery businesses. The fixed schedule of prices was attractive to AES because we could plan our business with some certainty. That allowed us to make long term investments to improve service. The prices were attractive to consumers too, because they decline every year for the next ten years. Another, somewhat more subtle factor present in this Argentine scheme is the introduction of an element of competition even in the monopoly delivery segment. By auctioning the delivery business they were able to directly capture any monopoly premium for their citizens without the heavy-handed regulation that can distort markets.

A colleague of mine at AES, Mr. Robert Venerus, has a good conceptual description of this new paradigm. He calls it "The Shrinking Natural Monopoly." Our current industry structure here in the US was designed in the 1930's around the concept of regulation of natural monopolies. What Mr. Venerus means is that the empirical evidence coming in from over a decade of electric sector reform around the world teaches us that a relatively small part of the chain of activities involved in the provision of electric services is a natural monopoly. Now, as we restructure the largest and most important electric sector in the world here at home we know that many functions that were traditionally heavily regulated can be provided more effectively by a competitive market. Customer service, metering, billing—these are all commercial activities that are not monopolies and can be competitively provided.

The only parts of the system that still have the characteristics of a natural monopoly are the "bottleneck" facilities, namely the delivery system. For markets to work we need many sellers to be able to reach many buyers through an effective delivery system and we only have one "bottleneck" delivery system. For the most part it's privately owned so everyone needs open and non-discriminatory access to our delivery grid on a common carrier basis. Ensuring such open access can only be done at the Federal level. Under conditions of open access, market forces are perfectly capable of setting prices. We have a lot of experience in this area and, as I've noted, it's our belief that the delivery service monopoly is best regulated on price not cost of service or profit. These older models have resulted in bad investment decisions and huge stranded costs that stifle competition. The most effective form that this regulation can take is a contract between the regulating entity and the owner of the delivery system that establishes prices (and service quality) for the delivery service. This contract should also contain mechanisms to share any productivity gains that the owners make with consumers.

Such structures have worked well for both consumers and investors. AES alone has invested over \$3.0 billion in delivery businesses since 1996, all of them with contract-based, price regulation. Companies have much more impetus to bring forth creative, new ways of doing business under such a system because they can increase their profitability. Consumers get a known, stable price and receive a share of the benefits from any productivity gains. Here I should mention that a company like AES, with a wealth of experience and ideas in the delivery of electricity from around the world, is severely restricted by current law from sharing what we have learned with consumers here at home in the United States.

Maybe a good way to sum up is to give you a thought to reflect on the next time you hear someone mention a phrase that represents one of the central sticking points of the current debate—the "obligation to serve." Under the cost-plus regulatory system we have today we often hear that utilities have this burdensome "obligation to serve" anyone who wants electricity. To a company like AES, coming at it from our perspective of service in open and competitive markets, that glass isn't half empty—it's quite full. To us this so-called burden looks like a valuable right; we would pay to have it. I hope you can see how for us, thinking in terms of a system where the customer can vote, it's transformed from an "obligation to serve" to what keeps a company like us going—namely the "opportunity to serve."

Thank You.

Mr. SHIMKUS. Thank you, Mr. Tribone.

We will conduct ourselves in the same manner we asked the panel to. We will limit ourselves to 5 minutes for questions, and then we will get through the panel.

So I will push the light for myself, and I will recognize myself for the first 5 minutes.

I would like to kind of highlight. It is always beneficial to listen to all the testimony, and I am just end up kind of on the obligation to serve.

We balance a couple of things. We balance the national interest, and also our local constituent interests. Mine is a very rural District, over 300 miles, 19 counties mostly small towns, agriculture.

So I want to first move to Mr. Perry and ask. Could you specifically talk about providing service to the rural sector? Could you just elaborate on that more?

Then really I guess the issue will be, we are talking about the retail market now, how do you perceive being able to go out in Montana 50 miles down and service a small section of rural Montana.

Mr. PERRY. The way we look at it is, for the larger customers or industrials in the larger cities you know there is lots of competition, and price is everything, and margins are narrow.

So we look for the places where there isn't competition because, as much as we are competitive, we like winning more than we like competing.

So if we can earn an additional margin there, that makes it worth the cost of sales to go see those customers or an aggregate of those customers and that becomes much simpler.

In Montana, the examples I can point to are Montana Hospital Association. They put together the 40 rural hospitals that we have and as a group came to us and said we would like to purchase together. That makes it easier.

We have an irrigation district as well that has approached us and said we represent a group of farmers, and how can you help us? Am I getting to your question?

Mr. SHIMKUS. Well, you are and we continue to follow up with questions, but in the hospital association you believe a Federal bill would have to ensure the ability to aggregate, which is what you are doing with the hospital association?

Mr. PERRY. We did not need a law that allowed them to do that. They did it on their own. It is amazing how smart customers are. They will figure out a way to extract a value in the market, and I think that what deregulation or restructuring allows us to do is allows those customers an opportunity to think about how they can take advantage of the system.

Mr. SHIMKUS. But you definitely would not propose anybody eliminating the possibility to aggregate?

Mr. PERRY. Absolutely not.

Mr. SHIMKUS. Okay, let me go to Mr. Mittleman with the same question on the fuel cells. I think we are all going to be excited about fuel cells. I have always—I think it is part of freedom, if we could disconnect ourselves from the umbilical cord of wires, I think Americans would feel a little freer.

Talk about the actual perceived cost and how that would affect a retail consumer out in Montana, which is really a low-cost power State.

Mr. MITTLEMAN. Mr. Chairman, if I may I would start by telling a little story.

Last September we had a guy drive up in his pickup truck. He came up to our receptionist and he said, I think his exact quote was, "Honey, I want my fuel cell. Where's the loading dock?"

And she very politely explained that we are still under research and development and we have not got any to sell.

And he said, "No. You don't understand. I'm here for my fuel cell."

He reached down and he picked up a brown paper bag, a grocery bag, and he said, "Look. I've got my \$10,000."

And he opened it up and there was \$10,000 of cash in the bag. This man was ready to drive off with his fuel cell.

It turned out that he was a farmer that drove about 50 miles to our location from outside of Bennington Vermont. He said. When I lose my electricity, which happens to him quite often because it's a rural community and he is at the end of a distribution line, he said it's not an inconvenience to me; this is my livelihood. It is my way of life. I can't pump water. I can't milk my cows. I can go out of business.

Paying \$10,000 for a fuel cell is a bargain.

Mr. Chairman, just quickly getting to your question about cost, within a few years after we're commercial we believe the cost of a fuel cell will be between \$3,000 and \$5,000 installed in a customer location. This will be approaching \$500 per kilowatt.

Now in comparison, if we look at the conventional grid system today, a power plant will cost \$600. The transmission and distribution lines will cost another \$400. For a total of \$1000.

So we are looking at something within a few short years of being one-half the capital cost of the traditional grid.

Mr. SHIMKUS. Thank you very much.

My time has expired. I will turn to the ranking member, Mr. Hall, for 5 minutes.

Mr. HALL. Thank you.

Mr. Mittleman, I imagine your farmer missed that radio that he watched Rush Limbaugh on, too.

Mr. HALL. I think, Mr. Randolph, let me talk to you a moment or so about the position or the role that FERC ought to play and how they ought to come into it.

There are thoughts on the committee that they ought to be severely curtailed; some that think we ought to leave them about where they are; others that want to put more authority on them.

I notice that the role that FERC is going to play in the new market, how can they do that without additional Federal guidance? And what guidance do you recommend? And you do that with your—I know you are familiar with the recent decision by the 8th Circuit and the effect it is going to have and the requirement it is going to spawn onto this committee to either write them around that decision or be relegated to wait for 2 years before we can have any type of real knowledge as to what position FERC is going to have.

Do you have some opinions on that?

Mr. RANDOLPH. Yes, sir. We believe that FERC probably does need some expanded authority. What I talked about today was addressing the market power concerns, giving them some authority to

order divestiture of generation in order to address market power concerns and additional stranded costs.

But they probably do need some additional authority to address the 8th Circuit's decision. This is an interstate market. To allow power to move more freely between regions, to alleviate regional disparities, and so forth, they could certainly use additional authority.

We are quite active at FERC and would love to work with them on any proposal they would have for additional authority here.

Mr. HALL. I think from your testimony you indicated that Dynegy is merging with a utility and are in the process of that now that has some various generating units.

Yet, it is a little hard for me to understand. You state that Dynegy supports incentives for divestiture of generating assets. You seem to say that you believe that Congress has to encourage divestiture.

Is that a carrot? Or is that a Thou Shalt? Why is it that you are not satisfied with leaving it to the States?

Mr. RANDOLPH. Well, there is a lot of interstate activity. The States can only go so far. We have seen a disparity between what different States do with generation. But to address our particular situation, the utility that we are merging with is in fact divesting 20 percent of their generation.

They have signed a definitive agreement to sell their 900 megawatt nuclear plant to Amergen, and that deal will close before we close our merger with them. They have spun out their remaining generation to a nonregulated affiliate.

So that is an example where we are in that very situation where we are seeing divestiture of generation.

Mr. HALL. Did you work some or have some input with the Texas law that they recently passed down there?

Mr. RANDOLPH. Yes, sir, we did.

Mr. HALL. You seem to be calling for FERC authority to order divestiture of generation. How does that square with the Texas provision that gives some direction to utilities with market power problems to take a different approach to it?

Mr. RANDOLPH. Well the Texas bill, all in all, was in our view better than not having a bill at all. It does have a January 1, 2002 date certain. And as it relates to divestiture, they did not go that far but they did order the utilities to engage in these capacity auctions of 15 percent.

Now at one point in time they were going to require utilities to divest down to the 20 percent level in terms of market share within ERCOT. At the very last minute in that bill, there was a provision that got passed that allowed utilities to pass through environmental upgrades in their stranded cost recovery which allowed them to exclude that from the calculations, effectively eliminating divestiture of generation.

We opposed that, but supported the bill anyway.

Mr. HALL. I'll take just another 30 seconds if I might, Mr. Chairman.

You seem to be at a position where the authority FERC has now you want to leave it where it is, maybe not enlarge it? Or if you do enlarge it, enlarge it with a precatory clause or something that

leaves some States rights involved in it? Is that kind of your position?

Mr. RANDOLPH. Yes, sir, that's basically the position. I mean, tremendous progress has been made in this market both at the State level and in the market itself.

Mr. HALL. I met with a group this morning. Someone in the group indicated that the court had indicated that if the Congress did not address the decision that they were going to give some priority to making a decision where we are not hung out for 2 years.

I yield back—the chairman is getting after me right now. I yield back my time.

Mr. SHIMKUS. There is no time to yield back, Mr. Hall, but—

I will recognize the gentleman from Oklahoma, Mr. Largent, for 5 minutes.

Mr. LARGENT. Thank you, Mr. Chairman.

Mr. Randolph, I would like to follow up on Mr. Hall's questions. You said that the utility in Illinois was divesting about 20 percent of their generation assets.

Why are they doing that?

Mr. RANDOLPH. They are doing that because it is a nuclear plant. They only operate the one nuclear plant, whereas the party that they are selling it to operates seven or eight nuclear plants, and it is just simply more efficient to do it that way.

Mr. LARGENT. So it is not a market power issue?

Mr. RANDOLPH. Well it is not a market power issue, but it is in fact a divestiture of 20 percent of the generation.

Mr. LARGENT. But FERC did not order it?

Mr. RANDOLPH. They did not. And in fact a lot of it is occurring. Utilities are deciding on their own volition to divest.

Mr. LARGENT. Right. But you are saying you want FERC to have the ability to order divestiture, even though utilities are divesting on their own.

My question is. Do you think that market power abuse occurs more as a result of generation, or transmission?

Mr. RANDOLPH. I think it is a little bit of the chicken and the egg. I think it is both. There are potential for market power abuses in terms of the, as Mr. Tribone was talking about, obligations to serve, things like capacity benefit margins and so forth, where that can be utilized in terms of the control over the transmission to sell say generation that they have at higher prices to other utilities, and it is difficult to get at.

Mr. LARGENT. What I would like you to do is explain to me an example of market power abuse in generation when you are now living—imagine the day when we are living in a deregulated, ordered open access world on transmission—explain how market abuse would occur on the generation side.

Mr. RANDOLPH. Oh. It really, I guess, relates to if you are in a load pocket where there is limited transmission, and you define the market that you just simply cannot get outside of that area because of the transmission limits.

Mr. LARGENT. So what you are describing is in all likelihood a temporary problem at the beginning of the transition to a deregulated market?

Mr. RANDOLPH. We certainly hope that it would be temporary, but our experience has been that it has been very difficult to get new transmission capacity added.

Mr. LARGENT. I understand that.

Mr. SHIMKUS. Would the gentleman yield just on the point of your previous question?

Mr. LARGENT. Certainly.

Mr. SHIMKUS. The selling of the Clinton power plant was not a forced divestiture.

Mr. RANDOLPH. No, sir.

Mr. LARGENT. You actually were selling it.

Mr. RANDOLPH. Correct.

Mr. SHIMKUS. So no one is telling you to do it. You are doing it—I mean, they are doing it of their own volition.

Mr. RANDOLPH. We are not merged yet.

Mr. HALL. Would the gentleman yield?

Mr. SHIMKUS. Yes.

Mr. HALL. I understand the pattern of sales where they have one or fewer of such. It is a pattern that is established. It is a sensible business decision rather than a forced Federal decision; right?

Mr. RANDOLPH. Yes, sir. Absolutely. But however you get there, the point is that it is a significant reduction in market power whether done voluntarily or with incentives or sticks from the Federal Government.

Mr. SHIMKUS. And I will give the gentleman back the time that we usurped, but thank you.

Mr. LARGENT. Let me just ask you one final question about that divestiture. How did they do in terms of the value that they got in the return on their investment? In other words, how did they do in relationship to their book value on that nuclear plant?

Mr. RANDOLPH. It is significantly below value. That is where the bulk of these stranded costs are in the nuclear assets, but there are a lot of above-book-value offsetting that in some of the other assets.

Mr. LARGENT. On the other utilities——

Mr. RANDOLPH. Correct.

Mr. LARGENT. [continuing] generating facilities.

Mr. Tribone, you had a comment?

Mr. TRIBONE. Yes, Mr. Largent.

First, we are a large producer in your State. We have the AES Shady Point Plant. But I wanted to sort of——

Mr. SHIMKUS. Mr. Tribone, could you bring the microphone a little closer again?

Mr. TRIBONE. I'm sorry. I wanted to chime in on this point. We are facing these issues all over the world, not just here in the 50 States.

I think that the key issue is the access, the transmission and distribution system. So that companies like us who are in the competitive sector can have the access.

You will see us more and more as we have access, and really only the Federal Government can ensure this, because it is not a State by State thing, it is regional or national, and you will see us more and more moving toward the customer as we have that access.

I mean, our company is starting a new company called Power Direct, a brand name to deal directly with the customer. And I am sure Dynegy is doing the same kind of things.

But these issues, I think you had it right on the money. The generation market power is usually locational in nature, and there have been a lot of solutions to that. And as you say, that is a temporary problem.

The main thing is that there is a system for access to the customers over these bottleneck facilities. That is the key thing for us.

Mr. LARGENT. The truth is, even in a transitional phase that a lot of the things that we are seeing today like fuel cells and distributive power, they really will mitigate the market power issue, the locational market power issue as well. Isn't that true?

Mr. TRIBONE. Yes. My remarks were sort of the shrinking natural monopoly, and right now I think most people would say the only thing that is left is the wires. But some of these technologies people would say there is not even a monopoly there anymore. I mean, those can eliminate that monopoly.

Mr. LARGENT. If I could just one more question, since you took some of my time, I wanted to ask Mr. Perry a question about Montana.

Mr. SHIMKUS. You gave me that time, remember?

Mr. LARGENT. Actually, I didn't, but that's okay.

Talk about "market power." Mr. Perry, you talked about kind of the aggregation going on with the hospitals in Montana. I guess Montana's population is what, about six or seven hundred thousand people?

Mr. PERRY. Nine hundred thousand.

Mr. LARGENT. Nine hundred thousand. So you are getting close to having two Representatives in the House. That would not be bad.

Mr. PERRY. Yes, Congressman Hill is looking for a cousin.

Mr. LARGENT. As long as you send another good one like Rick Hill, we will be fine.

The question I have, you know I can see how there is a value of aggregating hospitals or large businesses, manufacturing plants, in Montana, but the question that a lot of members on this committee would say is. What about the small guy? The farmer that is just out there in the corner of Montana? Is that a customer that you guys are going to appeal to and seek as a customer, even if he does not have the ability to aggregate with some irrigation group that he is associated with?

Mr. PERRY. On a purely residential level, I am not sure that we are the right company to reach out to that customer. That is why my testimony talked about issues like Amazon reaching that customer, or a retail grocery store, something of that nature. I am not sure that we are the best for that.

But on a reasonable-sized user, we like to do business face to face. What I look at in restructuring, one of the beauties is one word, "information." It is not about choice and it is not about price, it is about information.

If I tell a rural farmer that when he runs his pivot at 2 in the morning, he can buy cheaper power because off-peak power is 30

percent cheaper in the Northwest grid than it is on-peak, and he says, gee, I never knew that from my utility before.

Of course he did not because the utility's incentive is throughput, not efficiencies. He will adjust his consumption just like we adjust our consumption on telephone long distance. Right?

We do not call at 4:55, we wait until 5 after 5 and get that ten-cent-a-minute rate, or eight-cent, or whatever the discount is after hours.

Electricity offers that same thing. We need to give the customer the right price signal. And that is what we do, is develop products like that. Once you have that, then those users that can modify behavior will benefit.

Mr. LARGENT. So in your view there will not be any rural customers at any level that will fall through the cracks as a result of deregulation?

Mr. PERRY. You are still going to have the low-income. For example, and the LIEAP program maybe addresses that, the Low-Income Energy Assistance-type stuff. There is still going to be an issue there.

There are going to be the customers that choose not to be more efficient users of the grid, whether they are businesses like a retail store is actually an inefficient and expensive cost-of-service customer. They should pay a little bit more because they cost more.

We are giving everyone the right pricing list to be more efficient. So we actually accomplish a couple of goals in the restructuring.

Mr. LARGENT. Thank you, Mr. Chairman.

Mr. SHIMKUS. Thank you.

Now I would like to turn for 5 minutes to co-chair of the Restructuring Working Group, Mr. Tom Sawyer from Ohio.

Mr. SAWYER. Thank you, Mr. Chairman.

I gathered we started at 9:30 this morning. Everybody had such a good time last night that we just stayed over? Is that what happened?

Mr. SHIMKUS. You can tell if I am in the chair and that not that many people showed up—

Mr. SAWYER. I apologize for missing most of your statements. I really thought we were starting at 10. It is my fault.

Let me just begin by saying I think that one of the things that Mr. Tribone said at the end of his commentary is enormously important. That as we struggle with questions of restructuring, it is very difficult to depart from the terminology and the way of thinking that has defined an industry for a century. So let me just offer a couple of observations.

Then what I would really like you to do is, from the point of view of changing technology, talk to me about how those observations will be effective and will change.

First of all, I believe that this is happening not because Fred Kahn got a vision in the late 1970's, but rather because the technology changed and made it possible for the kind of thing that he ultimately described and led to; and that that is happening throughout this industry in ways that you represent leading edges of.

That is to say, in brief, that this whole exercise that we are going through in the States and here is happening not because it should

have happened a long time ago, but now for the first time and increasingly in recent years it can happen.

Understand that it seems to me is very important in shaping our direction.

The second is that, at least in this transitional phase, that transmission takes on a new and very unaccustomed role from what it was developed for and becomes actually the backbone of competition; and that if we are going to make competition work, that we need to pay very close attention to how we deal with transmission among, across, and within markets. That also goes right to the heart of what all of you are doing.

And the third is that, even to the degree that we talk in terms of this disaggregation of components of a vertically integrated industry, that when we talk about generation, transmission, and distribution that we need to prepare for a time when those functions not only will be disaggregated but will in many different ways become indistinguishable.

I am not going to be able to make this point if you are all paying attention to the changing of the Chair over here.

The critical question is the degree to which generation, per se, substitutes for transmission, substitutes for distribution, and that we are coming into a world in which the notion of load pockets as a problem of transmission may just as easily be solved by a distributed generation system as it would be by a FERC Order requiring the development of transmission.

Having said all of that, can you talk to me about the way in which we ought to deal with, primarily, the way we build a transmission system, a regional, cross-market grid that anticipates that change in technology, whether it is the technology of line loss, or new-generation capacity, or whatever it may be?

[No response.]

Mr. SAWYER. Dead silence.

We are sitting here looking, for example, at FERC authority in terms of transmission. We are doing it in terms that are traditional to FERC authority. their ability to monitor the transfer of assets among what used to be service territory, rate of return driven public utilities.

You are talking about a very different world. building a transmission system that goes beyond what we have today; the equivalent of a U.S. highway system in the 1950's. Yes, it interconnects with itself, but it was never designed to do that. Never designed to do it.

What we are trying to do is, at least in this transitional phase, build an interstate highway system, but we do not want to overbuild it. And we do not want to put in place regulatory structures that may make sense in a transitional, natural monopoly, but may make no sense in the world that you are preparing for.

Can you talk to me about how we build that?

Mr. Mittleman?

Mr. MITTLEMAN. Mr. Sawyer, I may be able to help out a little bit. One of the customers that Plug Power and G.E. will be selling to is a rural electric cooperative. The individual who runs that company made a very insightful comment. He said that he views his distribution network as the stranded costs of the future; that as

new forms of distributed generation come around, there may not be a need, or as great a need for transmission distribution as what we have today.

So I think part of the heart of the matter comes around how fast will new technologies come about so that they can supplement the grid as we know it and we do not have to build out quite as fast.

What I can tell you is that we will be commercial. Plug Power will have commercial product in 2 years. I can also say that the first year of this commercial product is going to be minuscule. We are not looking at having millions of units in the first year, or even the second.

It will probably, if the transition of our technology happens in a way which is similar to what we saw with microwave ovens, VCRs, cell phones, other very successful technologies, it is typically 20 to 30 years from the time that the technology is first introduced to the time that it is fully penetrated within the market.

So that could put us into 2020, 2030. To the extent that we will need more transmission and distribution lines to meet the short-term, my gut says, yes, we probably will. But my gut also says to be a little bit careful because these new technologies will be coming along quickly, and where they will first come along will be to meet the gaps so that people will not have to put in the stranded costs of the future.

Mr. LARGENT [presiding]. The gentleman's time has expired.

Mr. SAWYER. It has, indeed, but we do have a comment here if we could hear it, briefly?

Mr. LARGENT. Sure.

Mr. SAWYER. Thank you, sir.

Mr. RANDOLPH. If I could add to that, I certainly agree with distributed generation, fuel cells, energy efficiency in the long term being a surrogate, but in the short term what is happening now is these gas-fired merchant plants are being laid down as quickly as possible.

I think if you tried to guess what was going to happen with the transmission network with everything that is coming on line in the next three to 4 years, whatever guess you make would probably be wrong.

But if anybody is in the best position to make that judgment on a national level, it is the FERC. It is a very complex subject. You are going to need a lot of input from a lot of people.

Mr. LARGENT. Mr. Tribone?

Mr. TRIBONE. To directly answer your question, there is not an easy answer in the U.S. But as I mentioned, we are in 49 countries. Every other country went to a single-owner common-carried system. Of course here we have 50 different jurisdictions, and maybe 150 different owners of the transmission system, so it is very complex. But that is the only model I know of out there that works.

With the new regulatory structure on that common carrier, but other countries were able to do it easier because they started from a base of not 50 different jurisdictions with so many owners.

Mr. SAWYER. Thanks for your flexibility, Mr. Chairman.

Mr. LARGENT. The gentleman from North Carolina is recognized for 5 minutes.

Mr. BURR. Thank you, Mr. Chairman.

Mr. Mittleman, I would just make one comment on your remarks. I think they are 100 percent accurate, if we let the market drive the maturing process. Without allowing the market to do it, I am not sure that you will see this development that you saw with the microwave oven, or the cell phone, or anything else.

The one distinct difference was the Federal Government did not have a finger, a hand, a foot into those industries that limited at what pace the development could take place, or the opportunity for the markets that they could get into. And I think that is the real reason that this panel has been assembled to talk about innovation and other things.

I want to move to Mr. Randolph real quick. Define for me "market powers". Define for me market powers.

Mr. RANDOLPH. Basically the ability to extract a higher price from the market, or to deny a competitor access to the market.

Mr. BURR. Define for me market powers as it relates to a deregulated world, assuming that we write the right bill, define for me where market powers could exist.

Mr. RANDOLPH. Okay. In the deregulated world, that is going to be on the transmission and distribution assets. Generation is highly competitive.

Mr. BURR. You cannot have market power problems in generation if you move to retail competition? Is that correct?

Mr. RANDOLPH. On a national level that is correct. You may be able to define a market to where that might exist because of a load pocket.

Mr. BURR. Mr. Perry?

Mr. PERRY. We have done a lot of studying of market power and have used the Harvard Business School theory of that. One of the five competitive forces is the power of a supplier. That is defined not on a national but on a market-by-market basis, whether that is in Montana or Northwest Region, or Southeast Region, and supplies if they are oligopolistic and control most of the supply, they have market power.

Mr. BURR. Would you agree if this committee, if this Congress, does the correct job in legislation, which means that at some point you have no monopolies left, that you would not have a market power generation problem? You may have some limitations that exist still with the transmission grid, but in fact are we not seeing—in fact, Mr. Randolph, you are building a gas-fired facility I think in Rockingham, North Carolina? Am I correct?

Mr. RANDOLPH. Yes.

Mr. BURR. Others are building facilities around the country. I would imagine that one of the site decisions has to do with population shift, has to do with current generation load in a given area, probably some consideration was made when those site determinations were made based upon the transmission lines, the lack of adequacy or the adequacy; and that you would not put a new generation facility at a place where the population was declining or where there was a new transmission feed that did not have limitations?

Are those correct assumptions on my part?

Mr. RANDOLPH. Absolutely.

Mr. PERRY. Certainly.

Mr. BURR. Let me go to the divestiture, because I will be honest. Out of everything I have heard today, most of it I agree with totally. The one thing I do not agree with is the increase of authority for FERC.

I believe that that is headed in the wrong direction and is in fact the wrong thing to do when you talk about deregulation.

The company you are merging with has divested generation other than nuclear? Am I correct?

Mr. RANDOLPH. They have divested out of the utility to a non-regulated affiliate their other generation.

Mr. BURR. So they have got an affiliate that is going to hold onto the generation now?

Mr. RANDOLPH. Right. But they have done both, and they have netted it all together.

Mr. BURR. But there are companies that are divesting themselves of generation other than nuclear? Am I right?

Mr. RANDOLPH. Oh, absolutely. And we've bought some of it.

Mr. BURR. Exactly my point. Why does FERC need to be involved in directing that sale, encouraging that sale? Is the market not doing it today? And in fact if we accelerate the deregulation, if we go from 22 States to 50 States, will that not serve as an incentive itself for you to make business decisions based upon properties you would like to now own, or no longer own?

Mr. RANDOLPH. It could. It is possible that it could do that. But in your question earlier about market power and specific markets, in some cases you may end up with somebody that has got 80 percent market share——

Mr. BURR. Understand that my definition of "market power" is a monopoly.

Mr. RANDOLPH. Okay.

Mr. BURR. My attempt is to not have monopolies after this. And I think that is the—if you have retail competition, true competition, then monopoly is the only definition of market power. Because I cannot force all the competitors to be the best. All I can do is make sure that there is an atmosphere to encourage as many competitors as possible; right?

Mr. RANDOLPH. Yes.

Mr. BURR. And the development of fuel cells, and other things, to hold everybody else honest.

Yes, sir?

Mr. TRIBONE. In thinking about this divestiture and elimination of monopolies, this is probably heresy but really what we should be thinking about is divesting the transmission systems. I mean, generation is not the issue.

Mr. BURR. I will assure you there is no person more passionate to get the transmission piece right than Mr. Sawyer who asked the question on it, and I think that is the will of the subcommittee and full committee as well.

Let me ask one last question and then I need to go make this vote.

Should FERC continue to have the authority over mergers? Or should we take this opportunity to place that authority at the FTC and DOJ where a majority of the merger authority in America exists today, with a referral to FERC for the expertise?

Would anybody like to comment on that?

Mr. TRIBONE. Yes. I mean I think as I have said that one area with the Federal Government is really the transmission. The second is this whole area of investment, and mergers, and so on.

I did not mention it in my comments, but we, although we have all this experience that I talked about and ways of organizing and ways of doing things in competitive markets, we as a non-utility company are severely restricted from investments here in the U.S.

So that is another area where I think we need to have some changes at the Federal level, especially the Holding Company Act, which is very restrictive.

We cannot invest here in the U.S. And the mergers I think are best handled by not so much at the SEC and FERC, but by the FTC and the normal antitrust agencies I think would be the best way to do it.

Mr. BURR. Any other comments? I have decided I am going to miss the vote.

Mr. RANDOLPH. As long as FERC maintains the ability to utilize their expertise, whether it actually goes through the FERC or through the FTC, I think that is the critical piece because they do have so much expertise in this area. It would be a shame to lose that.

Mr. BURR. Well I think if you looked at the history of the FERC and the DOJ today, they certainly reach out to the agencies that have the greatest expertise for their comments on most mergers, if not all mergers.

The difference is that FERC up to this point has not had a tremendous amount of mergers, and the process is very slow. I think most of you would agree that in today's business atmosphere to wait for 18 months for a determination by FERC as it relates to a potential new business partner does not necessarily serve as an incentive for the attraction of capital for that new business, and in fact technology—Mr. Mittleman may have his Fuel Cell up and running by then, and every decision that you set a criteria for the merger might be out the window by the time somebody determined that it was okay.

Any other comments?

I welcome the chairman back. Glad to have you. I would yield back at this time.

Mr. BARTON. And what is your name?

Thank you.

We have several Congressmen who want to come back and ask this panel questions, so I am going to ask some questions and hopefully we will have very informative but also somewhat lengthy answers—so we can hold the fort until the calvary arrives again.

My first question is to you, Gen. Philbin. You are testifying today at the request of Congressman Tauzin who is fascinated by this new technology that you and your associates are trying to put together.

I am an engineer and made As in physics, but I must admit I have no clue at all about what it is you are trying to do.

What, if any, provisions should we put in the electric restructuring bill that deals with the type of technology and the type of product that you hope you and your company can provide?

Mr. PHILBIN. Well the Congress can do two things with regard to this technology.

No. 1 is to make public statements that this type of technology is in fact in the public interest and should be encouraged and nurtured.

The other aspect is that we should be allowed, with no regulation until some problem arises that requires regulation, to develop this technology as best we can and as quickly as we possibly can.

Mr. BARTON. Now your technology, the service, the product, you use the electromagnetic field that is generated around a wire that is transmitting electricity?

Mr. PHILBIN. That is correct.

Mr. BARTON. You use that field, and you generate within that field, or you transmit within that field the electronic signals? Is that correct?

Mr. PHILBIN. That is correct. We use a microwave laser to inscribe the signals on the magnetic corona around the wire.

Mr. BARTON. So if there is no electricity going through the wire, then you do not have a medium for your—

Mr. PHILBIN. Absolutely correct.

Mr. BARTON. [continuing] product? Okay.

So do you pay a fee to the transmitter of the primarily electrical current to use that electro magnetic field?

Mr. PHILBIN. I am sure that that is what the transmission companies and generation companies would want. But what we wish to do is to pay for all these things by licensing the technology to content providers of audio, video, and data and make our profit in that regard.

Mr. BARTON. If I am Texas Utilities and I have a cross-country transmission line, what you are saying is you license a provider who then goes to Texas Utilities and pays a fee to use that electro magnetic field?

Mr. PHILBIN. It could work that way. Or the company itself might want to get into that kind of a business, which would require the ability, without regulatory burdens, for an electric company to go into that type of business, thereby creating competition in the entire field.

Mr. BARTON. Okay. Well, of all the people that are testifying today, your part of the industry is the most exotic in terms of what I am tell.

Let me ask the general panel this question. Is distribution unbundling? That is, requiring regulators to allow retail competition for products and services related to the distribution of electricity, as an example metering, necessary to bring the full benefits of competition to retail electric consumers?

Does anybody want to answer that? Mr. Perry?

Mr. PERRY. In Montana, we have not unbundled the meter, per se. The utility still owns it and maintains it and operates it.

What is critical to us at this point is not the meter but the data that the meter can give us, the hourly interval data that allows us to shape and buy our power, balance it and so forth. That is much more critical than owning that piece of hardware.

There is other information that the meter can do, and I am not an expert on that kind of thing. I think the larger companies can

speak to the ideas of using that as a cable, or an Internet provider, and so forth and so on. But what is critical is having incremental data every hour of every day and the ability to reach out and grab that data on almost an hourly basis.

Earlier we talked about technology. The one thing that we are struck by is that we could not have deregulated power 5 years ago without the Internet, because the Internet allows us to transmit huge streams of data back and forth between the utility and the suppliers and the marketers so that we can schedule and balance.

That is much more critical to us than the piece of hardware sitting at the customer's site.

Mr. BARTON. A similar question, and then I am going to yield. Karen, have you already asked questions?

Ms. MCCARTHY. No, but you can come back to me.

Mr. BARTON. Yes, we will get back to you.

But, Mr. Pickering, you have not asked questions, right?

Mr. PICKERING. Right.

Mr. BARTON. My last question before I yield to Mr. Pickering is. How important to the deployment of distributed-generation technology is it to include provisions regarding net metering in our expected bill?

Mr. Mittleman, you look interested in taking a crack at that.

Mr. MITTLEMAN. Thank you, Mr. Chairman.

In one aspect, net metering would be a blessing for Plug Power and for distributed generation. We would redesign our unit. We would design a unit that would be a baseload unit sitting at someone's house producing——

Mr. BARTON. Is this your Fuel Cell over here?

Mr. MITTLEMAN. This is our Fuel Cell off on my right.

Mr. BARTON. Okay.

Mr. MITTLEMAN. And when there were peaks, we would rely on the electric utility grid to meet those peaks. And when there were valleys, we would sell back to the electric utility company.

Prior to forming Plug Power, I was a vice president with Detroit Edison Company. I recognize that this could be the worst nightmare come true for an electric utility company, having to backstop distributed generation devices to running baseload and just provide the type of service, the peaks, and then having to accept electricity when they did not want it.

We have taken the proactive step of designing our unit so that it can run completely independent from the grid. It is self-sustaining. It can meet all the peaks and valleys of the home without the grid interconnection.

What is very, very important to us are two things:

One, many utilities talk about a disconnect charge, or an exit fee. If a homeowner was currently using the system and decided not to, they might have to pay some large amount of money to disconnect. That in itself could stop distributed generation in its tracks.

The second is having a type of connection with the grid so that if for some reason the Fuel Cell went down, we could flip back to the grid within a very, very short time period. We are talking 1/15th of a second. That is designed into the system that you see right now, and we would like to work with people like the Depart-

ment of Energy and appropriate national bodies to design Federal interconnect standards to help make that happen.

Mr. BARTON. Good.

The Chair would recognize Mr. Pickering for 5 minutes.

Mr. PICKERING. Thank you, Mr. Chairman.

Mr. Philbin, General Philbin, I wanted to follow up on some questions that the chairman started. I know that you are doing work down at Stennis Space Center, which is in my State of Mississippi.

In answering some of the questions as to is this technology feasible, has there been any, at this point, demonstration or market testing of the technology that you proposed and are working on?

Mr. PHILBIN. In the laboratory the proof of concept has been done by the Chief Scientist Luke Stewart. The purpose of the activity at Stennis is to do a full field test on an electric grid, which we think we could do within 3 months after funding.

We think that we could probably field the entire system within 14 months after we start the first field test. That has not been begun yet.

Mr. PICKERING. You mentioned 3 months after funding. Your funding source is private, public——

Mr. PHILBIN. Private.

Mr. PICKERING. [continuing] a combination? Private?

Mr. PHILBIN. Private.

Mr. PICKERING. A partnership with Scana? Is that correct?

Mr. PHILBIN. That is one of the things being contemplated.

Mr. PICKERING. Yes. But you have other private sources? Is your financing in place so that you can keep the schedule?

Mr. PHILBIN. Financing is not in place, but we are dealing with a number of companies, both American and foreign.

Mr. PICKERING. Now in Europe this technology has been demonstrated? Is that correct?

Mr. PHILBIN. It has been demonstrated, but not using the technology that we are using. And it is probably unique to the European area where the number of transformers per house is much fewer than they are in the United States. So the problem of getting through transformers is much more difficult.

Mr. PICKERING. How do you propose to overcome the transformer and the differences in the grid between the Europe and American models?

Mr. PHILBIN. Well, because we are using the magnetic component of the wave, it goes through the transformer without scrubbing the signals off. The transformer basically in most applications where the AC current itself has been the signal carrier scrubs off all the signals. And there are so many more transformers in the United States, the problem is exacerbated by the very number of transformers.

In Europe they have been using work-arounds, which do not seem to be very feasible. One is to wire around the transformer so that the signal does not go through the transformer at all, and there are other workarounds.

In Britain, because of the fewer number of transformers, they have been able to service through the transformers a small number of houses. But it is a very limited application.

What we are looking at is nationwide, Coast-to-Coast, border to border.

Mr. PICKERING. And you believe you can overcome the transformer issue?

Mr. PHILBIN. We do. We know that we can.

Mr. PICKERING. You mentioned regulatory uncertainty as it concerns or relates to your deployment of this technology.

What do you mean specifically by regulatory uncertainty? As you know, in the 1996 Telecommunications Act there was a provision related to PUCA, but all other electric utilities by the State preemption of imposing a barrier to telecommunication competition.

There should not be, as I interpret the Act, there should not be a barrier to your entry or your use of electric utility grids to deploy telecommunications services. Is that your interpretation?

And if not, what is the regulatory uncertainty that you see?

Mr. PHILBIN. At the present time, that is our interpretation. But there is always the problem with regulatory mindsets that if they see something new coming down the pike, they might want to try to force it into an existing regulatory model because there are similarities between what we are doing and some existing model.

We are concerned that that may occur, and financiers are also concerned about it, as well. It is the potential for regulation that is more of an impediment than anything else.

Mr. PICKERING. You have a Notice of Inquiry before the FCC at this time? Is that correct?

Mr. PHILBIN. Before the FCC?

Mr. PICKERING. The FCC. We have briefed the FCC, and the preliminary viewpoint was that, because we are using the magnetic component that it does not apply; that the current regulations of the FCC do not apply.

Mr. PICKERING. So right now it appears positive in that direction?

Mr. PHILBIN. At the moment it does, but we are afraid the mindset may change.

Mr. PICKERING. Mr. Mittleman. When is your deployment scheduled for the Fuel Cell and your product?

Mr. MITTLEMAN. We had a demonstration unit running a year ago, which is still running. We will have alpha units throughout this year. Beta units, or what we call precommercial, next year. And starting in 2001 we will have commercial units available.

Mr. PICKERING. And what is your strategic plan, or marketing business plan? What kind of penetration do you think you can achieve by the year 2001?

Mr. MITTLEMAN. At this point in time we are not releasing the specifics of that plan. However, it will be in the range of thousands, maybe tens of thousands, but not hundreds of thousands and not millions.

Mr. PICKERING. And over a 5-year period?

Mr. MITTLEMAN. By 2005 we expect to have approximately 1 million Fuel Cell Units built in total.

Mr. PICKERING. Thank you, very much.

Mr. BARTON. The gentleman's time has expired.

Mr. PICKERING. Thank you, Mr. Chairman.

Mr. BARTON. The gentlelady from Missouri is recognized for 5 minutes.

Ms. MCCARTHY. Thank you, Mr. Chairman. And thank you very much for this panel today.

I would like to ask the panelists to respond to a general question, and then I would like to follow up with a more specific question for a couple of panelists.

But given the success you have had with technology and innovation, what is really needed from the Federal level to help foster the continued development that you seek? And what do you most fear in terms of Federal action?

Any of you may respond.

Yes, Mr. Tribone.

Mr. TRIBONE. From my standpoint, I would mention two things I think that are really at the top of the list for us.

One is. Only the Federal Government can address this issue of access to the transmission system, access to customers, because that is such a balkanized system here in the U.S.

The second thing for us is the restrictions on companies like AES who have this broad wealth of experience in serving customers all over the world from investing here in the United States—and that is the Public Utilities Holding Company Act. That is very restrictive with respect to companies like us.

I think Dynegy is the same way. Companies who are not already utilities who are in the competitive sector really are restricted from investing in the electric sector here.

So those are the two main things for the Federal Government. I think the thing to fear would be that we try to do something in this whole debate that is so comprehensive that nothing can get done. I think I would prefer to see some things that can get done get done versus waiting for a whole comprehensive package, if we cannot get a comprehensive package.

Ms. MCCARTHY. Any other panelists? Yes, Mr. Mittleman.

Mr. MITTLEMAN. I think an important role that the Federal Government has played in the past, and I hope they will continue to play, is the support that has been lent to distributed generation technologies through agencies like Department of Energy and NIST, Department of Defense.

Many other countries are heavily supporting these types of technologies. We at Plug Power believe that we need public/private partnerships to make this a reality; that we cannot do it by ourselves. But with the Federal Government and with State governments we can make it real.

And we are right now at a place in time where the U.S. can be propelled into a leadership position in fuel cell technology, and we hope that will continue.

Ms. MCCARTHY. Mr. Perry?

Mr. PERRY. Thank you. Two concerns.

One is that the FERC, as aggressive as they have been toward getting to a market-based situation, become even more aggressive in regards to specific issues like balancing within a State.

In Montana we have proposed a way to balance on a market-based rate, and the FERC came back and said "cost-based." Except the utility that is doing the balancing invests no costs anymore.

They sold their generating assets. So we need a more open-minded view to let the States be laboratories when the States are willing to be laboratories, and when they are not maybe there is some Federal to push them that way, but in general if a State is willing to do something, let the FERC pull back and let them.

In the longer term our issue is more related to oligopoly power. I look down the panel and I see Dynegy and AES and they scare a small company like us. Because if they become too large, or if for example Bonneville Power makes it difficult to buy directly from a Federal agency, which it has been difficult for smaller companies to do, those are all good ways to let the market evolve, whether it is the Fed selling directly to small SBA-based type of companies, or the large companies not being too aggressive in things like credit policies.

So we need to have a balance there. And I think what Congressman Largent was talking about earlier was the Department of Justice and using enforcement there, I think that would probably be okay.

Ms. MCCARTHY. Anyone else?

[No response.]

Ms. MCCARTHY. I come from the State of Missouri and we have a 6.3 cents per kilowatt hour for residential customers and a 5.5 cents per kilowatt hour for our commercial customers, and our legislature is moving forward on legislation follow a this study from our Public Service Commission so we can be ready to deregulate.

And while the bill has not passed, it does address customers and how they are able to purchase power. I want to tell you about that, and then I want to ask a broader question about all of our customers.

Under the bill the customers would be able to purchase power from a Public Service Commission certified retail electric provider under a standard offer, or an individually negotiated contract with that retail electric provider, or a market aggregator who would negotiate with that retail electric provider, or an incumbent electric utility as a supplier-of-last-resort.

But my questions to Mr. Randolph and Mr. Tribone and anyone else who would like to weigh in is about the customer and the idea of real-time purchasing as a consumer.

It is very appealing on its surface. What education do you see will be needed to afford the average consumer the knowledge base to manage their own energy usage? And further, what accommodation would you propose to ensure that individuals who might otherwise be economically disadvantaged or possibly less sophisticated are not left with expensive energy to power their home?

Noting that Missouri's kilowatt hour is very attractive how do the consumers prepare to compete to keep the same attractive kilowatt hour?

I must confess to you, my worst fear is that they are not going to if we do not do something to educate them, and they are going to be competing with the commercial users and the bigger users and end up with a higher kilowatt hour, and they are going to get angry not at you but at us, Mr. Chairman.

So I would love your thoughts on us.

Mr. BARTON. "At us, Mr. Chairman"?

As soon as they answer this question, we are going to go to Congresswoman Wilson, but answer the gentlelady's questions before we go to the next questioner.

Mr. RANDOLPH. Okay. Different companies, as you have heard from this panel, have different market strategies in terms of the customers that they market to. There are plenty of companies out there that are targeting marketing to the residential customers and may be able to do that in the most efficient manner possible.

Someone mentioned the possibility of Amazon.com reaching those rural and small residential customers.

So whether you get it directly from a utility marketing affiliate, a Dynegy, an Enron, an AES, or an aggregator, I think ultimately those customers will be reached and that will be in terms of being competitive on the generation side, which is only one component of what that customer sees.

The other component, competition on the transmission and distribution side, I think is going to come from things like Fuel Cells and distributed generation and so forth that you have heard from other panelists, and that presents a very real possibility to keep those rates competitive.

And then further as it relates to the Public Utility Holding Company Act, if we get some of those barriers out of the way then you may see additional efficiencies with the T&D companies as they get together and eliminate redundant costs, and that lowers those costs as well.

Mr. TRIBONE. Yes. I would say that this whole area of educating the public has been one of our weakest areas. I mentioned earlier, possibly before you came in, that we were starting a new company called Power Direct to serve residential customers, and most of the investment we are making there is going to be on educating the consumer as to what is available.

As far as your question about the lowest-income consumers, that is an issue we have to be careful about. The best way I think that we have seen to handle that is to have, for the lowest-income customers, explicit help and an explicit subsidy versus trying to build that into the market system. Because there is no question that they need help, and to just make that explicit is probably the best way. So that is what we would recommend.

We are working in some systems like that around the world and it has worked fairly well.

Ms. MCCARTHY. Mr. Perry?

Mr. PERRY. We make the assumption, whether it is a small commercial customer or a homeowner, that information is good and they will make rational decisions.

One part of this unbundling is to show them the transmission costs, the distribution costs, the supply costs, and the demand side of that as well.

The customer starts to look and says, wait a minute. I am paying that much more for that component of my bill? If I manage that, I can save my own money, whether that is using Fuel Cell technology or just managing how I use energy in my house.

But right now what the customer does not have is that information. He has got a one-line bill from the utility and it has got a

price, \$50 a month, \$100 a month. So he does not even know what he is supposed to manage.

The utilities did that, with all respect to them, fine, but they did that because there was not a goal to be efficiently using energy; it was just to put it through to make their 11 percent rate of return.

Once you get out of that world and you give the information, customers act rationally. Those that do not ought to be penalized. Is that not the nature of our business, or our government?

Ms. MCCARTHY. Mr. Chairman, if you would indulge me in one quick follow up to that comment?

Mr. BARTON. Well if it is quick. We have extended the 5 minutes to about twelve already.

Ms. WILSON. Mr. Chairman, I would be happy to yield my time to the gentlewoman from Missouri.

Mr. BARTON. Well—

Ms. MCCARTHY. You are most gracious.

In addressing the consumer I quite agree with your response, but I had really a two-pronged concern. Yes, I believe if educated they will in fact act rationally, and if they do not there are consequences. That is the real world.

I am worried about in the arena of competition and what is available to them, if we do not act at this level, or empower the States and the public service commissions to make sure they address it, that those good rates, those reasonable rates now being experienced across the Nation will not be available to the consumer to even obtain. Perhaps I did not make that second point, and I do not want to take any more of the committee's time with an answer. Perhaps we can visit individually about that, but I would welcome any thoughts any of you have on that.

Thank you very, very much, Mr. Chairman, and I thank the Lady for her graciousness, and I hope you will not penalize her.

Mr. BARTON. Oh, don't worry about that.

Does the gentlelady from New Mexico wish to ask questions?

Ms. WILSON. I yield the balance of my time.

Mr. BARTON. The gentleman from Massachusetts, Mr. Markey.

Mr. MARKEY. Thank you, Mr. Chairman, very much.

Mr. Philbin, on page 3 of your prepared testimony you say, "As the Media Fusion neural network can recognize the smallest changes in appliance electricity use in the home, the system can provide profiles of customer appliance use."—customer appliance use. "Collectively these user portraits represent demographic and market trends."

What kind of information can your system collect about the consumer?

Mr. PHILBIN. About the consumer, only his electricity use and the type of appliance using the electricity. The amount and the type.

Mr. MARKEY. So for example let's take the toaster, the washing machine, the refrigerator, the TV set, the computer, let's go through that.

So you could tell how long each one of those things was in use in a home in the course of a day?

Mr. PHILBIN. And the amount of electricity that it used.

Mr. MARKEY. Depending upon what? Excuse me?

Mr. PHILBIN. On the amount of electricity that it consumed.

Mr. BARTON. Would the gentleman yield on that point?

Mr. MARKEY. I would be glad to yield.

Mr. BARTON. How do you know it is the toaster as compared to the computer? I thought an electron was an electron?

Mr. PHILBIN. There are algorithms, very complicated algorithms, that are a part of this system. It is not a very simple system; it is a very complicated system. And there are special polymers that we are developing at the University of Southern Mississippi Polymer Institute, and these are the types of things that will make these algorithms for us.

This is a very, very useful system for the electric generation and transmission industries. They have been looking for this type of sensitivity in measurement of the electric consumption for a long time. And it can be used because of its specificity to predict things like brownouts and other breakdowns in the system before the occur.

Mr. MARKEY. So they could then gather specific information about me?

Mr. PHILBIN. They could.

Mr. MARKEY. They would know, for example—a telemarketer would know when I was home by the fact that the stove was on, you know—

Mr. PHILBIN. Yes.

Mr. MARKEY. [continuing] at around 6:30 at night. So if their plan was to bother me when I was having dinner, they would know just when the stove was on. The telemarketer could get a profile of when every stove is on in every community so they know exactly when people are sitting around their kitchen table to get the maximum benefit from their telemarketing campaign.

Is that right?

Mr. PHILBIN. Our technical people predicted that there would be this concern amongst the consumers.

Mr. MARKEY. Yes. And I think it is a pretty legitimate concern. And I can see where telemarketers—It is a telemarketers dream in a lot of ways to be able to figure out when that stove is on, because that is what they are looking for. That is the maximum point of impact for this community.

So are there any restrictions on the use of this data right now?

Mr. PHILBIN. No there is not that I am aware of.

Mr. MARKEY. Do you think that consumers should be entitled to be able to protect—do you think consumers should be able to protect against the re-use of this information for purposes other than that which they originally intended?

In other words, they intend the electricity to be used only to cook that second-day ham hash. They do not intend it to be a profile that a telemarketer can use in order to telephone them while they are now eating?

Mr. PHILBIN. I would agree that they have a right to privacy in this arena, as in all others, actually. And I would say, no, I would not want that used against me by telemarketers calling me when I was home. Telemarketers are bad enough the way they are just doing it in the blind.

Mr. MARKEY. Thank you, Mr. Chairman.

And let me ask you, if I may, Mr. Triboney, or Tribone?

Mr. TRIBONE. "Try-bone."

Mr. MARKEY. Tribone. You say that there is a shrinking natural monopoly. The question for you is this. If transmission and distribution remain price-regulated monopolies, how can we encourage innovation and increase efficiency in these bottleneck facilities?

Mr. TRIBONE. Yes. Well today we mainly have cost-plus regulation. I think all of you who have been in this arena of restructuring can see really how badly and how poorly that has served us.

So I think that we have to move to a different type of regulation. It definitely still has to be regulated. We have talked about that here, and the role of the Federal Government in regulation of access.

But the model that we have seen that has worked that we were actually working in other countries is that the regulator enters into a long-term contract with a price, a known price, in it ahead of time with the transmission or distribution company.

That price can be declining. It should be declining so that consumers get the benefit over time. But it is a known price. And because the price is known and it is not regulated on a cost-plus basis, any creativity, innovation, new ideas that come out are shared between the company making them and the consumer.

So that is the structure that has worked best that we have seen, and we have seen a lot of them.

Mr. MARKEY. In the telecommunications industry we call that price caps. Is that what you are talking about?

Mr. TRIBONE. Yes, price cap. Similar to price cap.

Mr. MARKEY. Thank you.

Thank you, Mr. Chairman.

Mr. BARTON. Thank you. And I will let the gentleman know that we will work with him on privacy protection in the electricity restructuring bill. You and I have a little more influence on that than we may have had in financial services that was on the floor several weeks ago.

Mr. MARKEY. Thank you, Mr. Chairman.

Mr. BARTON. Does Mr. Ehrlich of Maryland wish to ask questions?

Mr. EHRLICH. I apologize for my lateness. Following up on the gentleman's line of questioning, I guess if you really wanted to fool telemarketers you would just keep the lights and everything on all day. That would really throw them off.

Mr. Philbin, let me just follow up in a serious vein here with respect to this information. It is not sold, or no one can gain access to this particular profile information with regard to use, correct?

Mr. PHILBIN. We have contemplated that the data would be used by the electric generation and transmission companies. We had not thought of the telemarketing things, except in some wild thoughts our technical people had. We thought of it as a tool for the grid itself.

Mr. EHRLICH. A tool for the grid, and maybe to educate consumers as well?

Mr. PHILBIN. Yes, as well.

Mr. EHRLICH. Okay. Thank you.

I yield back, Mr. Chairman.

Mr. BARTON. I think that concludes the first round. We are not going to have a formal second round.

I have one question, and I think Mr. Shimkus has one question.

General, I want to clarify your relationship with NASA. My understanding is that the relationship is more of a landlord, that your company rents space from facilities that they own. Is there a more formal relationship than that?

Mr. PHILBIN. With NASA directly?

Mr. BARTON. Yes.

Mr. PHILBIN. No, there is not. We are contemplating working with some of the NASA scientists at Stennis Space Center for various parts of what we are putting together, but primarily we have a direct landlord-tenant relationship with the Mississippi Enterprise. It is a State operation which includes the Center for Higher Learning, and we are going to be working very closely with the Center for Higher Learning in their capacity as a very sophisticated computer operation.

Mr. BARTON. Thank you.

Mr. Shimkus, for the last questions of this panel.

Mr. SHIMKUS. Thank you, Mr. Chairman.

I think more than cost for constituents and consumers, I think reliability will be the issue that a lot of careers will succeed for fail on.

So, Mr. Tribone, I have a question. In your testimony you talk about South America. Can you address. Was it not in Brazil that there were some reliability or production problems by your corporation? And can you explain, or give us a brief background on that and what has caused that to maybe not be a problem anymore?

Mr. TRIBONE. Sure. Well, in general the companies that we have been involved with have been improving the reliability were all companies that were formerly owned by the government. So we have improved those markedly.

The number of outages, the length of outages have improved by 30 to 40 percent.

I am not sure exactly what you are referring to but it may be something that happened in Rio de Janeiro 2 years ago in the summer, similar to what we had in New York City last week.

Actually, because of the El Nino effect, they had the 30 warmest days on record. So they had 30 days in a row of what we had here on the East Coast last week, or 2 weeks ago.

What happened is, the system held up fairly well but there were thousands of old transformers that we had not had a chance to change out yet. We did lose part of the city. And I am going to say this somewhat facetiously, but it was a small part of the city but it was where a lot of journalists lived so it got a lot of publicity.

Mr. SHIMKUS. Oh, I cannot believe you would get a lot of press because of that.

Mr. TRIBONE. We have invested a lot in the system since then. We have everything changed, and we have gone through two summers since then without any issues in Rio.

Mr. BARTON. Well we could say they make us sweat so it is good that you made them sweat, but we will not say that.

Mr. SHIMKUS. Thank you, Mr. Chairman. Again, on the reliability issue I think that needed to be part of the record, because

there is no perfect system, but we are striving to develop one and those concerns have to be addressed.

I yield back, Mr. Chairman.

Mr. BARTON. Thank you.

We want to thank this panel for your participation this morning and your lengthy participation. There may be written questions as a follow-up. If so, we hope that you will reply fairly expeditiously because we expect to be marking a bill up within the next two to 3 weeks.

So this panel is excused.

Mr. BARTON. We would now like to hear from our second panel. If Mr. Jordan Clark will come forward, Mr. Dale D'Alessio, Mr. Hans Mertens, and Mr. Don Deless.

Gentlemen, welcome. Your entire statements are in the record. We are going to ask each of you to summarize in 5 minutes.

We will start with Mr. Clark and go right down the line. Mr. Clark is the President of United Homeowners Association headquartered here in Washington, DC. So we welcome you. Your testimony is in the record, and we acknowledge you for 5 minutes to summarize it.

STATEMENTS OF JORDAN CLARK, PRESIDENT, UNITED HOMEOWNERS ASSOCIATION; HANS MERTENS, MANAGER, GOVERNMENT AFFAIRS AND PLANNING, WILLIAMS DISTRIBUTED POWER SERVICES, INC.; R. DALE D'ALESSIO, CHIEF EXECUTIVE OFFICER, iSOFT; AND DONALD DELESS, PRESIDENT, D&C DEVELOPMENT COMPANY

Mr. CLARK. Well thank you, Mr. Chairman, and members of the committee, for inviting us back. We were here I guess about 20 months ago when you started talking about electric deregulation.

Many things have changed since then. I want to reiterate that whatever is decided as far as a deregulated market, the people that are most affected are homeowners.

We spend \$80 billion a year on electricity. For most of us, that is a lot of money. For most homeowners, it is the second biggest bill they pay. For a lot of homeowners, about 30 percent, especially the elderly, it is the biggest bill they pay. So whatever is done has a great effect on us not only in paying our electric bill, but in paying for services and goods.

If we can reduce the electric bills of those people who provide us with the goods we buy, such as a Wal-Mart which spends I guess about \$640 million on their utility bills to the mom and pop grocer, we can in effect reduce the cost and put a lot more money back into our pockets, which we can then spend on the economy, invest, or perhaps even save.

But making sure all consumer classes are treated fairly in the electric deregulation era is really what we are all about. That means residential, commercial, and industrial.

So far, we feel that perhaps we have not been treated as fairly as we should have as far as residential customers are concerned.

As you well know, the States have taken the initiative on deregulation. I do not envy you your job. If I were still a staffer up here, I am not quite sure what I should do on this issue. You are between a rock and a hard place. We know that States rights are the

issue today for a lot of people, and should be, and this has been traditionally a market and a commodity that was controlled by the States on a regional basis if you look at grids. That has worked very well.

But a new day is dawning, and we want to make sure that it is done properly. So we will have legislation I assume in this Congress on electric deregulation.

And we want to make sure——

Mr. BARTON. Say that with a little more enthusiasm.

Mr. CLARK. We know we are going to have legislation from the committee to the floor and passed this Congress. We want to make sure that the residential customers are treated fairly and that it is done properly, and I am sure you do, too. That is why we are here.

But as I said, we are not too thrilled about what has happened in the States. In the 25 States that have looked at deregulation or have passed deregulation, there have been some problems with the way it is done. I am going to mention the dirty word of "stranded costs."

I have conservatively put in my statement that that is about \$100 billion that we residential consumers and some commercial customers are going to be paying for the price of deregulation. It is probably closer to \$200 billion, and will actually settle out to about \$160 billion by the time it is done.

If we spend \$80 billion a year on electricity and we save 20 percent a year on that, that gives us \$16 billion. But if we are paying \$160 billion for that, it is going to be quite a while before we realize any gains. So we want to make sure Congress understands how that is working in the States.

We think that the way it has been treated, not in all States but certainly some, and things are getting a little bit better; certainly the California system was transmitted to some States but Ohio seems to be doing a fairly decent job considering deregulation as far as stranded costs are concerned in other States. We have won some battles, but we basically lost the big battle on the stranded cost issue.

But I am not here to debate stranded costs; just to let you know that the future does depend on what has happened in the past, and will depend on what happens in the next few weeks as far as considering legislation.

Let me point out one example very quickly of how deregulation was not done properly. In California \$28 billion was given as stranded costs. It came out of the consumers pockets, and is still coming out of consumers pockets.

The tradeoff was a 10 percent reduction in our electric bills. If you add the cost of stranded costs to the electric bill, it is really a 20 percent increase in our electric bill. So we do not think that is fair.

In effect, also stranded costs reward inefficient electric companies. They come in and say, well, we have these costs we're not going to get paid for. If we got o deregulation, we have to compete. Therefore, we want to get paid for them.

The efficient companies do not have stranded costs. I think it is very inequitable and a terrible precedent to set in this country.

There is a company in Pennsylvania, an electric Company, they have \$4.7 billion in stranded costs. They went around and bought some nuclear power plants, which is the basis their stranded costs in the first place was based on.

So they mismanaged nuclear power plants, got \$4.7 billion, and went out and bought some more. That is a terrible disadvantage to anyone who wants to go in and compete, because if I have a \$5 billion cash drawer I can keep competition out of my market pretty quickly.

I see the red light on. Let me just say that in considering legislation there are a few things we would like you to have in the final package.

Prohibition of exit and entry fees. We think Congress should at least make itself known as to how they should be handled.

We have to ensure equal access to the marketplace by all consumer groups, residential and commercial and industrial.

And the right to aggregate is very important. Aggregation now can be had by homeowners, and that should not be impeded in any way by whatever we do here, or by what the States have done or will do.

Also, billing. Require concise, accurate, and timely billing. We have seen the telecommunications legislation that was passed. Billing has been quite a problem, which is being corrected, but if a homeowner cannot understand the bill there is less reason to change.

Mr. BARTON. Mr. Clark, we have got three more folks here. We have got your written statement.

Mr. CLARK. So basically I would ask the Congress to make sure that we do get fair treatment and equal treatment as residential customers and consider some of the recommendations we have made.

[The prepared statement of Jordan Clark follows:]

PREPARED STATEMENT OF JORDAN CLARK, PRESIDENT, UNITED HOMEOWNERS ASSOCIATION

Mr. Chairman and Members of the Committee, thank you for the opportunity to return to the Committee and express our consumer views on electricity deregulation and its present and future effects on competition, innovation and the future as it relates to the country's 68 million homeowners, otherwise known as residential customers.

Given the fact that a properly deregulated industry should produce new players, old players with new ideas, new products and services, more customer choice and lower prices, I'll let the industry representatives look into the future and tell of their goods and services forecasts for the energy marketplace. How and when a truly deregulated market comes about is another question.

America's 68 million homeowners have the most to gain or lose in the outcome over electricity deregulation. Not only do they cumulatively purchase more electricity than commercial and industrial users, they buy more goods by far than any other consumer group. Those goods all have an electric bill attached. If we can lower a Wal-Mart's \$640 million utility bill, a manufacturer's cost of producing goods, even the local donut shop's energy bill, consumer savings will be realized. Everybody benefits.

The monthly electric bill for most homeowners is second only to their mortgage payment. For approximately 30% of older Americans on fixed incomes who don't have a mortgage, it can be the biggest drain on their pocket book.

Not only can deregulation reduce the \$80 billion homeowners spend each year on electricity, lower electricity costs will reduce the price we pay of goods and services giving us more disposable income to pump back into the economy, invest or place in a savings account.

A 20% reduction in electric rates will put \$16 billion a year back in homeowners' pockets. Federal budgetary savings over ten years could exceed \$245 billion and public schools could save approximately \$27 billion in their electric bills. That could translate to a savings of \$27 billion in local residential property taxes and \$245 in federal taxes.

Making sure that all consumer classes (residential, commercial and industrial) are treated fairly and that deregulation does achieve its goal of a competitive marketplace are the principal challenges that Congress and the states have faced and will continue to address.

To date, the legislative agenda and subsequent deregulation have been controlled by the states. Congress, for better or worse, has let the individual states decide the course of deregulation.

Unfortunately, in many of the 25 states which have or are in the process of implementing deregulation, residential consumers are being forced to pay an unprecedented price for the process. Namely, well over \$100 billion in add-on fees to their incumbent electric companies. Not one penny of the \$100 billion, which the industry calls "Stranded Costs", goes toward the purchase of electricity by the consumer. In addition, the billions collected from consumers by the incumbent electric companies has in most cases had a negative effect on competition, producing the opposite of its intended results.

For example, California consumers under deregulation legislation passed in 1996 will pay \$28 billion in stranded costs to their incumbent utilities. In return, residential consumers will receive a 10% reduction in their rates. Sounds like a good deal until the electric bill arrives and the homeowner finds charges for "CTC" (Competition Transition Charge) and "Trust Transfer Amount" which add 30% to the bill. After the stranded cost charges are added, the 10% "legislated rate reduction" produces a 20% increase the electric bill.

It gets worse. Instead of bringing competition into the lucrative residential California marketplace, the stranded costs have produced the opposite results. Potential competitors are simply staying out of California's residential market until the stranded costs are paid off. The profit margins are just too little.

The same can be said in other states such as Pennsylvania, where high stranded cost recovery was allowed.

In addition to keeping real competition out of the marketplace until stranded costs are paid off, stranded costs give the utilities who receive them an extraordinary economic advantage over their potential competitors. For example, after receiving stranded costs totaling \$4.7 billion, a Pennsylvania utility bought additional nuclear power plants adding to its capacity in anticipation of real deregulation. The irony of that particular situation is that the utility in question justified its request for stranded costs on the argument of the negative worth of its present nuclear plants.

In effect, stranded costs reward inefficient electric companies with huge amounts of consumer dollars which in turn are used to compete with efficient companies who have no so-called stranded costs. Bad management is handsomely rewarded while the well managed efficient companies are penalized. A dangerous precedent set by the states in the stranded costs debate.

I am not here to debate the "stranded cost" issue. After three years of fighting the battle, we recognize the fact that the majority of state legislatures in granting the stranded costs have sided with the power brokers of the electric industry and are not about to revisit the issue unless they are forced by the courts or an enlightened electorate. But it is absolutely essential that we recognize that residential customers are being required to pay unprecedented sums of money to their electric utilities as the price for deregulation, and as a result a truly deregulated marketplace is years away from reality.

In considering any legislation, we hope that Congress will do what is necessary to insure that consumers get what they pay for in stranded costs and what we were promised by the states and the industry: a competitive marketplace, real choice, savings, additional services, reliability, aggregation, universal access and other benefits a deregulated industry will produce.

Due to the necessity of interstate transactions to bring about real deregulation, Congress under the Commerce Clause of the Constitution can if it chooses set parameters in the deregulation process being carried out in the states.

On the other hand Congress can also let the states do as they please, for better or worse, until forced to address issues between states affecting electricity or to address inequities or inefficiencies in the marketplace.

We hope that in the passage of electric deregulation legislation that Congress truly represents the consumer and mandates the following:

- The prohibition of exit, entry or similar fees being charged to consumers when they purchase electricity or other energy services.
- Equal and timely access to electricity and energy related services for residential, commercial and industrial customers.
- The right of any consumer of electricity or other energy services to join with other consumers for the purpose of aggregating their purchasing power.
- That a customers rights and opportunities to obtain alternative electricity or other energy services should not be unduly hindered, restricted or discouraged.
- A customers right to clear, concise, accurate and timely billing procedures which do not discourage or inhibit the continuation of the present provider or the choice of a new one.
- That the awarding of stranded costs does not discourage competition or distort the marketplace.
- That the payment of stranded costs must be equitably divided among all three consumer groups: residential, commercial and industrial.

I appreciate the reluctance of Congress to interject itself any more than it should into an arena which has traditionally been controlled by state government, especially in establishing rates. However, since "only Congress can ensure that a competitive retail electricity market is established throughout the United States", it has no choice but to address the issue if it wants deregulation and real competition for consumers to be brought about in a timely, efficient, effective and fair manner.

We do not feel that federal legislation should preempt the states ability to oversee the electricity industry within their borders. However, we do feel that the existing monopolies with few exceptions have exerted their well established political influence in key states to the detriment of the consumer and benefit of themselves.

Electric deregulation because of its unprecedented economic impact on all Americans is not an issue that Congress should debate for years. We hope that the Committee will move forward with legislation which will truly bring about real competition in the marketplace as soon as possible.

Again, thank you for the opportunity to address the issue and we look forward to working with the Chairman and other members of the Committee to bring about an effective, efficient and fair deregulation of the electricity industry.

Mr. BARTON. I would now like to hear from Mr. Hans Mertens?
Am I saying that right?

Mr. MERTENS. It is Hans Mertens.

Mr. BARTON. Hans Mertens, who is the Manager of Government Affairs and Planning for Williams Distributed Power Services in Tulsa, Oklahoma, the home of Congressman Steve Largent.

So we are glad to have you and to let you have 5 minutes to summarize your written statement.

STATEMENT OF HANS MERTENS

Mr. MERTENS. Thank you, Mr. Chairman. Good morning, members of the committee.

Mr. BARTON. Speak closely into the microphone, please, sir.

Mr. MERTENS. I will fix that.

I am delighted to be with you this morning. I do believe I have an important and exciting message for you all as it relates to distributed generation.

My formal comments are summarized for you in a 17-page document that looks something like this, and I would invite you to peruse that.

As I prepared for today's session, my greatest concern was knowing that this committee has wrestled with the issue of electric deregulation and such for the last 2 years, and I would have nothing new to say.

I must tell you, in listening to the insightful questions that I heard this morning, I am much relieved that the search for a great solution continues, and hopefully by using my time this morning to recount some personal experiences I may be instructive on how we

should proceed in this matter, and I respectfully ask your help on certain issues.

In 1981 my title was Chief Engineer, and I worked for Con Edison New York. I became convinced around that time that distributed computing—we call them PCs now—was a good investment to allow engineers to be more productive.

At the time, Con Edison, and quite frankly most large corporations, were mainframe shops. The theory? Only the big, important stuff needed to be computerized. If you wanted to computerize a process, go through some torture.

And if you prevailed and the program needed to be written, and if you had a big application and you could tolerate that, that was fine. But if you needed something done quick, forget about it.

Remember, we were still abbreviating 1981 as 1981' and that was done strictly to save storage space. Clearly we needed some flexibility.

In that environment, I went to the president of the company to get approval for the purchase of a Texas Instrument 64KB machine. It came with two 5¼ disk drives, a stack of floppies each with 360KBs of memory, and when I assembled it it covered the entire desk top.

I was proud to think I had control over my own destiny. I was firing a shot across the bow of the climate-controlled mainframe machine, and the vice president of our mainframe shop.

My boss and a lot of other bosses approved the purchase, warts and all, and changed history once and forever.

Today I cannot help but point to the similarities in the power generation area. Distributed generation faces formidable market barriers, some of which are unnecessary and represent corporate hysteria, while others relate to incumbents protecting their turf.

When AT&T was everyone's phone company in the 1970's, the best minds from its Bell Labs Division, Holmdel New Jersey, were used to justify that when somebody plugged a telephone into the jack in their house it could bring down the entire network system. Now that was if the telephone was purchased from Sears rather than the one manufactured by its Western Electric Division and leased by New Jersey Bell to its customers.

Well I think many of you remember those days. I have some contemporaries in front of me. And witnesses at that time predicted that the best telephone system in the world would quickly degrade.

Today I think we all know that Bell Labs has loosened and competes with New Jersey Bell, now known as Bell Atlantic, and AT&T is attempting to enter local markets in a big way.

Things do change, and I would offer that as a good analogy to where we are going.

Well I have already confessed to being a reformed engineer, and in that capacity I assure you the technology is available today to allow distributed generation to integrate effectively with all power grids and be a viable part of the market.

I have participated on a number of different task forces. I am a member of the New York ISO Transition Team, and a lot of issues that surface in those capacities tell me that this is very doable.

I have the utmost respect for the utility industry, and I fully expect it to survive and thrive in the restructured market of tomorrow. My pension depends on that for sure. But changes are needed.

Large, central generators can be bad. Having all distributed generation is not an optimal solution either. I believe both generation forms, in appropriate balance, is good, and an objective of partnering, not just tolerance, is best.

But much like the telephone jack red herring of yesteryear, I often hear experts predict the dire consequences of connecting DG units into the grid.

When forced to accept distributed generation as an energy source, these experts burden new projects with expensive inter-connection requirements intended to kill projects. And when projects do survive, then standby charges for power costs are designed to hurt project economics some more.

Conversely, when old central generation units are retired, there is seldom an attempt to encourage distributed generation and thereby avoid placing new unit into rate base.

I have one closing thought. Williams and the DPCA, Distributed Power Coalition of America, strongly believe in choice. Where competition exists and robust markets are encouraged, the consumer benefits.

A national vision needs to be articulated by the U.S. Congress that promotes restructuring while preserving regional uniqueness. I look forward to your questions.

Thank you, Mr. Chairman.

[The prepared statement of Hans Mertens follows:]

PREPARED STATEMENT OF HANS MERTENS, MANAGER, GOVERNMENT AFFAIRS AND PLANNING, WILLIAMS DISTRIBUTED POWER SERVICES, INC. ON BEHALF OF THE DISTRIBUTED POWER COALITION OF AMERICA

Mr. Chairman, thank you for the opportunity to testify before the Subcommittee today on innovation in the electricity delivery system. Few innovations offer as much promise for American consumers as distributed generation, which encompasses a variety of technologies, including onsite generation, storage and power controls. Together, these new technologies offer greater reliability and energy savings. I am here today to tell you about the hybrid applications of distributed generation that my company is pursuing as part of a global market strategy for our customers.

Williams Distributed Power Services is a subsidiary of The Williams Companies, a multinational corporation active in most aspects of the energy industry and also in communications. Our whose business units include five major natural gas pipeline systems that span the length of the mainline United States, energy production and energy marketing, including the creation of distributed generation solutions for our customers.

Williams is also a member of the Distributed Power Coalition of America (DPCA), a national group comprised of equipment manufacturers, energy service companies, natural gas and electric utilities and others. The DPCA has been involved on a federal and state level in initiatives that address distributed generation technology.

The Promise of Distributed Generation

Distributed generation is not new. It has been with us for decades in the form of backup generator units, cogeneration facilities and remote generation. In fact, Thomas Edison's first electric generating unit—the Pearl Street Station in New York City—was a distributed energy system. What has changed is the breadth of technological solutions now available in the marketplace, combined with a rapidly changing electric industry that will require greater flexibility in meeting complex needs.

Distributed generation is generally defined as power production located in close proximity to the market, either as: on-site generation at an end user's site, generation installed at a utility substation, or generation installed in close proximity to several users, which are tied directly to the generator.

This equipment could be installed on the "customer side" of the meter or the "utility" side. It can be grid connected and operated in parallel to the electric system, or operated entirely separately from the grid as a "power island." A variety of parties could own it, including the utility, the end user, an energy service company, the manufacturer, or some other third party.

Finally, distributed generation encompasses a wide range of technologies, including turbines, reciprocating engines, renewable energy sources and storage systems, all of which are available in today's market. In the very near future advanced or emerging technologies, like fuel cells and microturbines, will be added to that list.

The benefits of employing small, dispersed generation throughout the grid include increased reliability. In cases of natural disasters—hurricanes, ice storms—distributed generation could allow individual sites (or in some cases, whole sections of the grid) to remain in service. DG units could also protect the United States from widespread economic disruption in the event that major electric facilities failed—which has happened in other countries as a result of terrorist action or natural disaster.

Power quality is another major issue for those customers whose operations cannot tolerate wide variances in load that often occur on a utility system. Microchip manufacturers or companies that rely on sensitive computer equipment may choose distributed generation as a strategy to reduce productivity losses.

Small DG units will also play a vital role in providing back-up and peaking services. In an increasingly deregulated market, these small units can mitigate against price spikes. Real-life experience indicates that the capitol cost of such equipment can be recovered quickly.

In many areas of the country, electric utilities are reaching their capacity for peak load. Electric demand continues to grow while uncertainty in the market discourages investment in large, central plants. Many utilities are counting on customer-owned units to pick up the slack. In some areas of the country utilities are creating incentives for their customers to install equipment and allowing the capacity to be available at critical times.

Disbursed generating technology also provides flexibility to bolster service on constrained parts of the grid, or as an economic alternative for remote sites, like rural or mountainous regions, where few customers are available to share the cost of laying new electric line.

Finally, on-site generation automatically creates at least a 6-10 percent efficiency gain because it eliminates the electricity that is normally lost as electrons travel through transmission and distribution lines from central generation plants. In addition, advances in technology have resulted in units that have greater overall efficiency than central generation, particularly when the waste heat is used in a cogeneration or district heating and cooling application. Increased energy efficiency translates into fuel savings. And it saves money!

Using less fuel to produce the same amount of electricity also means fewer greenhouse gas emissions. In addition, advanced distributed generating technologies can dramatically reduce or eliminate many pollutants, including NO_x, SO_x, CO₂, mercury and particulate matter. Distributed generation has the potential to alleviate pollution in the Northeast and elsewhere. As Congress, Administrative agencies and state governments wrestle with ways to reduce a wide range of pollutants, it should consider the positive benefits of onsite generation.

Uniting Technology and Innovation in the Marketplace

Williams Distributed Power Services has been in the forefront of an emerging industry to integrate technological solutions to meet the needs of our customers. Our mission is to develop and provide competitive, repeatable distributed power solutions by utilizing the best technologies and taking advantage of the many resources of Williams.

Our services are driven by customer demand and the result has been a stream of orders, both from the domestic and international sectors. Today our company has projects totaling \$6.7 million that are near finalization. Our completed projects include base load power and steam for a Canadian university, a resource recovery project in the West, summer peaking projects in the Midwest and West Texas, and a reliability enhancement project in Mexico.

What are some of the leading customer issues? Power quality tops the list. Manufacturing and service companies in today's world operate equipment that is increasingly sensitive to power surges, spikes, noise and harmonics that they now experience with the existing electric grid. Companies also want to remain competitive in a global market, which means that they are concerned about saving money on peak shaving, or avoiding the costs of power outages.

The Williams Technology Demonstration Center in Tulsa, Oklahoma, has demonstrated that our approach can solve reliability problems for commercial and indus-

trial customers. A demonstration site that combines several critical technologies has been in operation since October of 1997. This demonstration incorporates three technologies into what we have called the "Premium Power Solution": the Capstone Microturbine, an advanced recyclable battery system designed by Powercell, in Cambridge, Massachusetts, and an advanced power control system.

The PowerBlock Premium Battery

The PowerBlock Premium Power battery is a highly-efficient, zinc oxide storage system that is rechargeable and designed for use with virtually any electric power source. The PowerBlock offers 100 percent discharge and may be cycled several times daily for uninterruptable power supplies, peaking, load leveling and other distributed resources applications. This new storage system also requires less than half the space of conventional batteries.

In addition, the Zinc-Flow Technology of the PowerBlock system is made of recyclable plastic, uses a salt solution instead of acids, and is low cost, while providing superior energy and power density.

The result is a dramatic increase in efficiency. To provide a comparison, the Williams Resource Center for UPS, also located in Tulsa, requires an 80 kW generator to supply 20 kW hours of electricity. This is a traditional on-site generating operation. Using the new technologies, however, our Premium Power demonstration site requires only 50 kW of installed capacity to deliver 100 kW hours of power! This means that we can deliver five times the amount of kilowatt hours of electricity, using about 40 percent less installed capacity!

These are only some of the technologies that Williams intends to employ at customer sites. Our company has executed letters of intent with 10 major suppliers and customers to develop a suite of options ranging from 30 kW to 20 MW and low cost telecommunication systems for controlling, monitoring and dispatching energy. In addition to the Powerblock™ Power Storage and Conditioning System that I have already described, our partnerships also include exciting new equipment that can serve a variety of customer loads.

Capstone Microturbine

Williams has contracted with Capstone and Kohler Corporations to install the 28 kW Capstone microturbine for onsite generation. This unit has extremely low emissions, is very compact, and is commercially proven. The Capstone has relatively low capital and operating costs, has good potential for combined heat and power applications, and can be easily integrated with storage devices.

The Capstone Turbine is excellent for use in resource recovery, for use in non-attainment areas, mini grids, and in commercial applications.

Solar Mercury-50 Turbine

Solar Turbines is commercializing its 4.2 MW Solar Mercury-50 turbine generation in November, 1999. This is a high simple cycle turbine with a 40% efficiency and low life-cycle costs. It has low emissions, can use different fuels, is suitable for remote operations. In addition, this new generation of turbine technology can be installed quickly and has potential for waste-heat recovery.

This unit can easily be used for distribution grid support, base, intermediate or peaking supplies for municipal customers, rural electric associations, as well as for sites in cities.

Caterpillar Power Module

Williams' also plans to take advantage of the Caterpillar Power Module, which is a mobile generating unit with an 1,825 kW capacity. It can be fueled by diesel or natural gas and is capable of operating in parallel with a utility power source as a load management system with provisions for standby operation feeding an isolated electrical load network. It also has the capability of operating in remote locations with the use of communication equipment.

STATE OF THE ART CONTROL EQUIPMENT

Encorp's "Virtual Power Plant™" Solution is a state-of-the-art software and hardware package for remote controlling, dispatching, monitoring and paralleling on-site power sources with the utility grid. This equipment is economic and can be used to control and dispatch power generation from multiple sites.

Mobile Cogeneration

Our company also plans to take advantage of mobile cogeneration equipment. We have an agreement with Gentor, which produces a 3.0 MW Mobile Cogeneration Unit. This equipment is fully skid-mounted and produced up to 30,000 lbs./hour of

steam. It is nearly 70% efficient with dual fuel capability. This equipment is suitable for industrial cogeneration applications, hospitals, universities, paper plants and gas processing plants. And the technology is available now.

Who will benefit from strategic planning? Customers who are seeking less expensive electricity prices, customers with remote power needs, and those who require premium power. The "Premium Power" hybrid that Williams created also saves money. In the example I gave earlier, the Williams' UPS building required over \$4.5 million to install a generating system. Using the "Premium Power" site cut that cost in half.

The Need for a National Vision

The new market reality is that generation and storage resources make technical and economic sense. Traditional government hand-out programs are not the answer. In fact, Williams has the ability to meet these needs today. But we do need to ensure that the market is free and fair for all participants.

As you know, 24 states have already acted upon electric restructuring legislation, including some of the most populous states such as California, Texas and New York. The DPCA is working at the state level to ensure that new regulations encourage the installation of distributed power, and the results thus far are encouraging. At some point, however, a national vision needs to be articulated by the U.S. Congress. We believe that comprehensive federal restructuring legislation will help to create a national vision for the future of electric power delivery.

One important issue the DPCA feels Congress should address is the creation of national interconnection standards for distributed power units. If you purchase an electric appliance today, that appliance will work throughout the United States. There is one set of safety and connection standards for appliances, developed in part by the Underwriters Laboratory. However, standards for the interconnection of generation equipment to the grid vary from state to state and even from utility to utility. It is critical that the United States develop a national standard for the interconnection of this equipment, so that a piece of equipment can be purchased (or leased) and installed in a relatively straightforward and timely manner.

It is essential that we minimize barriers to entry for new market participants. This would include creating guidelines for the amount of time allowed to process interconnection requests and siting applications. It would also include the creation of a national system for approving specific pieces of generating equipment, or even combinations of equipment for onsite use. There should also be reciprocity between states, so that a set of equipment approved in New York could be used in another state without undergoing a separate, redundant procedure for approval. The United States government could create a National Data Sheet to ensure that, once approved, equipment can be universally accepted. Such standards would encourage more customers to take advantage of self-generation, by taking some of the uncertainty out of the process.

The Administration's "Comprehensive Electricity Competition Act" (H.R. 1828) includes in Section 405 a provision for small-scale distributed generation interconnection. In addition, the legislation introduced by Congressmen Steve Largent and Ed Markey (H.R. 2050) also includes interconnection standards for distributed generation. The DPCA supports these provisions, and appreciates the efforts of the Administration and of Reps. Largent and Markey.

It is important to note that the provisions anticipate participation by non-governmental entities, including the Institute for Electronic and Electrical Engineers, in the development of these standards. We believe that interconnection standards should build in safety and reliability without creating unnecessary and burdensome expenses that would make distributed power equipment uneconomic.

Both of these bills also include accelerated depreciation for smaller-scale generation equipment, which is in step with real-world business planning. And both measures contain tax incentives for certain sizes of cogeneration equipment, which will act as an incentive for Americans to install the most energy efficient systems that are now available.

The DPCA also has some concerns about exit fees and/or transition charges, to the effect that they discriminate against distributed generation. We recognize that this is largely a state issue, and that Congress may very well leave such matters up to the individual states. If the Congress does create a federal policy on stranded cost recovery, however, we urge you to consider a prohibition on exit fees or other transition charges that "unduly discriminate" against distributed generation.

Conclusion

Distributed generation promises to change the electricity industry in much the same way that personal computers changed the face of computing. PCs have revolu-

tionized our economy, bringing computing power to the desks of tens of millions of Americans. The same future awaits the electricity industry. Distributed generation can bring reliability, power quality, and lower costs to all classes of consumers.

The Chairman of this Committee, Tom Bliley, has often talked about the need for greater customer choice in electricity. We agree. We believe, however, that the ability for a customer to generate his/her own electricity is perhaps the ultimate form of customer choice. Such ideas sound far-fetched today. But so did cellular phones and personal computers just a few short years ago. Competition tends to lead to more technical innovation and better products and services for everyone. The DPCA thanks this Committee for being an advocate for change.

I want to thank you once again for giving me the opportunity to testify.

Mr. BARTON. Thank you, sir.

We would now like to hear from Mr. Dale D'Alessio who is the Chief Executive Officer of a company called iSoft. I thought that was probably a diaper company, but I am told it is not.

Mr. D'ALESSIO. Afraid not, Mr. Chairman.

Mr. BARTON. It is headquartered in Vienna, Virginia. We welcome you. We will put your statement in the record and give you 5 minutes to summarize it.

STATEMENT OF R. DALE D'ALESSIO

Mr. D'ALESSIO. Thank you.

Mr. Chairman, members of the committee, I am honored and pleased to address the subcommittee—

Mr. BARTON. Speak closely into the microphone. These microphones are not very good.

Mr. D'ALESSIO. Okay. I am honored and pleased to address the subcommittee regarding innovations for the future of electricity competition.

This is an issue that is on the forefront of everyone's mind in the utility industry. But first I would like to thank Congressman Steve Largent for the opportunity to be here.

Thank you, Congressman.

I want to go on record to state that I am not here to promote or challenge deregulation. I am here to address how companies like iSoft can help the utility industry have a fair and level playing field in a deregulated market.

The utility industry may be moving into a very dynamic environment similar to what the telecommunication industry has just experienced.

Recently, the telecommunications industry changed from a single-source, noncompetitive environment to a competitive, deregulated environment.

Suddenly the consumer had a choice of carriers and multiple services. Most telecommunication computer systems were not prepared to handle this change.

When MCI began their Friends and Family Program, AT&T could not adjust their system to compete with them. They had to drop to a flat rate. They lost valuable market share by not being prepared.

Not being prepared can create drastic financial consequences such as the loss of market share, profit, and customers.

There are numerous companies that have developed applications geared toward handling this competitive environment. They have proven themselves in the telecommunications industry.

The software issues associated with deregulation and competition have been solved. With the onset of possible deregulation, utility companies will need the ability to create and modify customer price plans to maintain their competitive edge.

They will also need to easily add services and business segments as their customer base expands. And with this expansion comes the need to view and manipulate data from many sources. The software industry has these capabilities now.

We often hear the same concerns from customers, whether they are in the telecommunications, utility, health care, or other industries. They typically fall into four classic categories: mergers and acquisitions, customer service, customer billing, and E-commerce.

First, mergers and acquisitions. The objective of a merger or acquisition is to leverage the strength of two companies. Solutions for convergent billing help companies achieve this successful merger by rapidly integrating dissimilar systems and their information. By deploying pricing plans quickly, IT staff can provide customers with improved services and a fresh image of that new company.

Second, customer service. What increasingly sets organizations apart is their level of customer service. It is also vital for profitability. For it costs less to keep an existing customer than to acquire a new one. In fact, in most businesses customer service is a critical element of survival. The challenge is to understand the customer's needs and aspirations and to service them effectively. Solutions for convergent billing leverage and share customer information by integrating all of the company's diverse data streams, providing a complete view of the customer base.

Additionally, these solutions help create new services quickly and present real-time access to information enabling better customer service.

Third, customer billing. iSoft is one of a number of companies that currently provide solutions that turn the vision of a convergent bill into a reality, reducing the time necessary for implementation and, in the process, lowering the cost and leveraging existing IT infrastructure.

Fourth and finally, e-commerce. Business on the Web is growing fast but has yet to reach its full potential. What is holding it back? Its integration. The most difficult challenge facing most companies on the Internet is integrating their web site with their existing systems.

But e-commerce means more than just connecting your customer with web-enabled facilities. It means interactive and dynamic customer service and management. Today's solutions for convergent billing offer some of the most advanced options for integrating the web with existing billing and IT systems.

Mr. Chairman, I hope I have provided a little insight into how companies like iSoft can help a deregulated utility industry. Thank you for your time.

[The prepared statement of R. Dale D'Alessio follows:]

PREPARED STATEMENT OF R. DALE D'ALESSIO, CEO, ISOFT CORPORATION

Mr. Chairman, Members of the Committee, I am honored and pleased to address this subcommittee regarding innovations for the future of electricity competition. This is an issue that is on the forefront of everyone's mind in the utility industry.

But first, I want to thank Congressman Steve Largent for the opportunity to be here today.

I want to go on record to state that I am not here to promote or challenge deregulation. I am here to address how companies like iSoft can help the utility industry have a fair and level playing field in a deregulated market place.

The utility industry may be moving into a very dynamic environment similar to what the telecommunications industry has just experienced. Recently, the telecommunications industry's landscape changed from a single source non-competitive geography to an extremely competitive deregulated market. Consumers have a choice of carriers for a communications service: long distance, local, mobile and more. Most information technology (IT) systems were not prepared to handle this change. When MCI began their "Friends and Family" calling plan AT&T was not prepared to adapt its calling plans to compete with MCI. As a result, AT&T lost valuable market share.

Not being prepared can create drastic financial consequences to any company such as loss of market share, loss of profit and loss of customers. There are numerous companies that have developed applications geared toward handling this competitive environment and they have proven themselves in the telecommunications industry. The issues associated with deregulation and competition have and are being addressed in the telecommunications market and are being solved from an IT perspective. Not only can iSoft Corporation and other companies provide solutions to be competitive in deregulated markets but their products are also reasonably priced and may allow companies to leverage their existing technology investments. iSoft as a small company has partnered with Convergys Corporation, one of the world's largest billing entities, to provide a total billing and customer care solution.

With the onset of possible deregulation, utility companies will need the ability to create, add and modify customer price plans to maintain their competitive edge. They will also need to easily add new services and business segments as their customer base expands. And, with this expansion comes the need to view, manipulate and modify data from many sources. The IT industry provides these abilities.

Solutions are currently available that allow a robust enterprise integration capability which provides access to data between databases and other applications, regardless of the type of system or file format. A company's unique business expertise can be captured and automatically applied and the flow of their business processes can be automated. The time to implement business and pricing policy changes and add new services can be reduced from months to days or even hours. And there is no requirement for expensive programming skills.

We often hear the same concerns from customers, whether they are in telecommunications, utilities, healthcare, insurance or other industries. They typically fall into four classic categories. Although you may call them by different names, you will recognize the business issues: mergers and acquisitions, customer relationship management, customer billing and E-commerce.

First, Mergers and Acquisitions. The objective of a merger or acquisition is to leverage the strengths of two companies. The relationship can be very complex, with integration or consolidation of business processes, assets and even cultures. Get it right, and successful consolidation can create opportunities for cross-selling, better service and cost reduction. Get it wrong, and chances are the benefits of the merger will be lost. It goes wrong when a company fails to adequately integrate IT systems, this may result in the loss of key people, important customers and even shareholder confidence.

The redundancy of multiple data centers and processes needs to be eliminated. Users from both companies need to be able to share information across varied platforms. Success will very much depend on the speed of integrating these applications, connecting the networks and deploying an application strategy that enables the users to be productive.

Solutions for convergent billing help companies achieve a successful merger by rapidly integrating dissimilar systems and their information. By deploying pricing plans quickly, IT staff can provide customers with improved services and a fresh image for the new business.

Second, Customer Relationship Management. What increasingly sets an organization apart is its level of customer service. It is also vital for profitability, as it costs less to keep an existing customer than to sell to a new one. In fact, for most businesses, customer service is "the" critical element for survival. From call centers through Web browsers, IT is the primary means of customer service delivery today and excellent customer service requires flexible, speedy, and responsive IT systems.

Nevertheless, the challenge is to understand customer needs and aspirations, and to service them effectively. Solutions for convergent billing leverage and share accumulated customer information by integrating all of a company's diverse data

streams, with a complete view of the customers' information. Additionally, these solutions help create new services quickly and present real-time access to information, enabling better relationship management and greater opportunities for cross selling and customer retention.

Third, Customer Billing. In the past, billing systems have not delivered a convergent bill because of technology issues, like linking existing data systems and customer care, tax, accounting and a host of other applications with the new billing system or extending it to the Web. However, technology has evolved and today convergent solutions are a reality.

iSoft is one of a number of companies that currently provide solutions for convergent billing that turn the vision of convergent billing into reality, reducing the time necessary for implementation and, in the process, lowering cost and leveraging existing IT systems. If companies are challenged with maximizing their business value with a billing application, there are solutions that offer rapid integration and implementation between all other applications, with minimum risk. Additionally, today's software allows companies to achieve a truly convergent bill through integration of software products with their existing systems. Data can be available to people and processes in and beyond the enterprise, when and where they want it.

Fourth and finally, E-commerce. Business on the Web is growing fast, but has yet to reach its full potential. What is holding it back? Integration—the most difficult challenge facing most companies on the Internet is integrating their Web sites to their existing systems.

But, E-commerce means more than just connecting your customer with Web-enabled facilities. It means exploiting the immediacy of the Web to build a new and dynamic relationship with customers by providing innovative and compelling services like electronic bill presentment and electronic payment. Today's solutions for convergent billing offer some of the most advanced options for integrating the Web with existing billing and IT systems.

Mr. Chairman, I hope I have provided a little insight on how companies like iSoft are poised to help utility companies prepare for a deregulated market place. Again, I want to thank you for the opportunity to be here today and I will be pleased to answer any questions you or the other members may have.

Mr. BARTON. Thank you, sir. And thank you for finishing on time. That is a nice precedent.

Mr. D'ALESSIO. Thank you.

Mr. BARTON. Last but not least, Mr. Don Deless, who is the president of D&C Development Company in Wayne, Pennsylvania, and he is here representing the National Association of Home Builders.

Welcome. Your statement is in the record, and we will give you 5 minutes to summarize it, sir.

STATEMENT OF DONALD DELESS

Mr. DELESS. Thank you, Mr. Chairman, and members of the subcommittee, as was said, my name is Don Deless and I am Chairman of the National Association of Home Builders' Energy Subcommittee, a land developer, and an energy consultant from Wayne, Pennsylvania.

I appreciate the opportunity to testify before you today on electric deregulation and innovative technology in the future.

I would like to first speak about NAHB's position on electric deregulation, and then talk about innovation.

NAHB supports deregulation, provided it is done in a fair and comprehensive manner and housing affordability is not negatively impacted.

NAHB was pleased to hear that Chairman Bliley is not going to pursue date-certain Federal legislation. NAHB has long been concerned about forcing deregulation on States that are not prepared. This could be disastrous.

We remain concerned about the administration's deregulation proposals which gives even more regulatory power to the Federal Energy Regulatory Commission and sets intractable levels of renewable energy sources that will ultimately be paid for by the public.

A priority for NAHB is to keep housing affordable. NAHB's No. 1 concern is what will happen with infrastructure and the price of new homes under deregulation. A vast majority of the States incorporate into the overall rate base the cost of infrastructure.

Distribution lines, transformers, meters, all of which are required for new residential development. These costs are currently not separated out as a connection charge to a lot or a new home.

Unfortunately, under deregulation the utility will likely charge for these infrastructure fees. In California, where deregulation is furthest along, our builders have seen hookup fees as high as \$3500 being directly leveled on the home buyer and builder.

Even a small increase in the cost of building a new home could significantly hurt potential home buyers and home builders. NAHB advocates language in any deregulation bill directing infrastructure fees not be passed on to the home builder or buyer.

This leads me to the issue of stranded costs. NAHB believes it is important that any stranded costs be spread equitably over the customer base. There needs to be guarantees that the small customer will not shoulder a disproportionate burden of stranded cost recovery as nontraditional energy sources court larger, more appealing customers.

Finally, I would like to talk about the beneficial energy incentive programs and the possibility of technology innovation in the future.

NAHB believes there are important energy programs that also must be preserved as we move toward deregulation. Continuing these programs is of the utmost importance if we are to encourage innovative energy technology in the future.

Continuing voluntary energy efficiency programs and rebates to builders and homeowners are important along with allowing builders and utilities to continue to use brand names established for voluntary energy programs.

There needs to be a concerted effort to preserve these programs in a deregulated industry. The building industry has found that technology innovation is very difficult and hard to market without incentives. Market trends have shown that there is less interest in energy efficiency when utility rates and bills are low.

Innovative incentive programs help spur the introduction of innovative technology into residential construction. Once these technologies take hold of the mainstream market, the costs of the product will come down, therefore offering the consumer a cost-effective and affordable product.

Another way of spurring innovative technology is to offer energy efficient tax credits. NAHB applauds Congressmen Markey and Largent for including this type of incentive in their deregulation bill 2050.

Although NAHB has concerns with some of the levels of energy efficiency required for new homes to qualify for the credit, we believe these incentives are important if we truly want to move energy efficiency technology forward.

In conclusion, NAHB hopes that in any deregulation bill Congress will carefully address the impact of infrastructure costs and consider the importance of incentives for stimulating innovative technologies in a deregulated market.

Thank you.

[The prepared statement of Donald Deless follows:]

PREPARED STATEMENT OF DONALD DELESS ON BEHALF OF THE NATIONAL
ASSOCIATION OF HOME BUILDERS

Good morning Mr. Chairman and members of the Subcommittee, my name is Don Deless. I am Chairman of the National Association of Home Builders' (NAHB) Energy Subcommittee and am a land developer and energy consultant from Wayne, Pennsylvania. I also am a former employee of PECO Energy Company where I worked in their marketing department for over 30 years. I appreciate the opportunity to testify before you today on electric deregulation and innovative technology in the future.

The National Association of Home Builders and its 197,000 member firms have enjoyed a long-standing relationship with the utility industry. As you can imagine, the issue of electric power deregulation and its potential impact on our members and the customers that we serve is of major concern to the home building industry. As an industry comprised primarily of small businesses, and as one of the most regulated industries in the nation, home builders are very sensitive to regulations or barriers that stifle competition, increase home buyer costs, or unfairly favor one interest over another.

I would like to first speak about NAHB's position on deregulation and then talk a bit about innovative technology in the future with deregulation. NAHB supports deregulation, provided it is done in a fair and comprehensive manner and housing affordability is not negatively impacted. We are pleased that Chairman Bliley is not going to pursue "date certain" federal legislation. NAHB has long believed date certain legislation would be a mistake. NAHB believes forcing deregulation on states that are not prepared could be disastrous. Moreover, a federal structure by nature does not adequately consider local and regional concerns that might better be addressed by individual states. We remain concerned with the administration's deregulation proposal which gives even more regulatory power to the Federal Energy Regulatory Commission and sets impracticable levels for renewable energy sources that will ultimately be paid for by the public—in particular the residential customer. NAHB believes that this committee must thoroughly consider how deregulation will effect infrastructure costs and ultimately the cost of a home.

Specifically, NAHB believes the utility industry, legislators and regulators need to adopt an economic and regulatory framework that provides safeguards to ensure the following: 1) Residential customers should not pay higher rates; 2) Housing affordability must not be negatively impacted; 3) Residential customers should not bear unfair burdens in stranded asset recovery; and 4) Programs beneficial to home buyers should not be eliminated. I understand that this committee is addressing many of these issues. However, NAHB wants Congress to understand the infrastructure concerns the building industry has under electric deregulation. In addressing deregulation, we have to ensure that competition is fully and fairly achieved, and that all Americans benefit from the competition and choice. Higher costs for the customer and home buyer are critical issues for the home building industry. All classes of customers—residential, commercial, and industrial—whether large or small users, should equally benefit from rate reductions.

Infrastructure Costs

Topping the list of NAHB's priorities is to preserve housing affordability. Under a deregulation scheme, NAHB's #1 concern is what will happen with infrastructure and the price of new homes. A vast majority of states incorporate the cost of infrastructure into the overall rate base. These infrastructure costs include distribution lines, transformers, meters, etc., all of which are required for new residential development. These costs are currently not separated out as a connection charge to the lot or new home. The manner in which hook-up fees and transmission of electricity will be paid is a question of utmost importance to the building industry. For example, in California, where deregulation is furthest along, developers now pay for the infrastructure. Hook-up fees have been as high as \$3,500. These costs, that had been previously spread across the rate base, are now levied directly on the home builder/buyer in California. Even a small increase in costs of building a new home could significantly hurt the home building industry—more than 40,000 potential

home buyers are forced out of the market with every \$100 increase in the purchase of a median-priced home. Guaranteed distribution and transmission of energy service needs to be a key area addressed in any deregulation effort, otherwise infrastructure costs and hook up fees will fall to the builder and developer and eventually to the home owner. This cost would deprive thousands of families from the American dream of home ownership.

NAHB advocates language in any deregulation bill directing infrastructure fees not be passed onto the home builder/ homebuyer.

Further, the deregulation of the electric utility industry could also raise home prices through increased impact fees and raise the cost of housing through increased property taxes. For years, utilities have paid substantial sums in state and local taxes based on the value of their assets. If changes in deregulation cause the value of those assets to decline, their tax payments will decline as well. As these contributions decrease, localities could turn to higher property taxes or impact fees on new homes to compensate for the loss in tax dollar. This would result in an increase in housing costs.

Residential Customer Costs

NAHB is concerned that large industrial and commercial customers will be able to negotiate agreements with the lowest cost providers, thereby creating higher costs for residential customers to compensate for the loss of revenue. It is important to not just protect "customers" but specifically to protect "residential customers" who may be put at a disadvantage in deregulation. The threat exists that newly emerging energy brokers, not bound by geographic boundaries but able to provide services to anyone, anywhere, will attempt to appeal to the larger industrial customer by offering them lower prices.

This could mean that most home builders, the majority of which are small businesses, would not be offered the same competitive prices of the larger user.

Further, the cost for services that had previously been provided as a matter of course could be shifted wholly to home builders and homeowners. In turn, construction costs for new homes could be significantly impacted depending on how deregulation occurs. In order to adequately compensate the utilities for their past investments in generation, as mentioned before, it may be necessary for electric utilities to recover these costs through increased hook-up fees and transmission charges for residential customers. The builder must factor each of these potential cost implications into the construction of a new home. Both increased electric rates and higher building costs could adversely impact the overall affordability of new homes. No customer should pay a higher overall rate, including transition surcharge, than they paid prior to deregulation.

Stranded Costs

NAHB believes it is important that any stranded costs be spread equitably over the customer base. There needs to be guarantees that the small customer will not shoulder a disproportionate burden of stranded cost recovery as non-traditional energy sources court larger, more appealing customers. For example, a utility may have built a power plant in the mid-1970's or early 1980's that produces electricity at a cost of seven cents per kilowatt-hour. Today, low natural gas prices, improved technology and increased competition has made it far less expensive to generate electricity and a newer or progressive plant can produce electricity at three cents per kilowatt-hour. The critical question is who will make up the difference between the cost of production from power plants that were built when costs were high and today's lower prices? A system that allows big business to take advantage of lower costs from competition and leave higher costs to smaller businesses and home owners that are not yet being served by those competitive forces is unacceptable.

NAHB is also concerned that potential home owners in rural areas will be put at a cost disadvantage, as they will not have the purchase power of those in more populated regions. Hook up fees in these areas are already costly, this could spike prices even higher. Any deregulation proposal needs to ensure that service will be provided universally at an equitable rate.

Beneficial Energy Programs

Finally, I would like to talk about current beneficial energy and innovative programs and how they can be successful in a deregulated future. NAHB believes there are important energy programs that also must be preserved as we move towards deregulation. Continuing these programs is of utmost importance if we are to encourage innovative energy technology in the future. For example, energy assistance programs for low-income consumers and energy efficiency-related efforts in the residential sector, including voluntary energy-efficiency programs and rebates to builders and homeowners are important and should be continued. The bulk of the ex-

penses associated with these important programs are currently paid for by electric utilities, which recover these costs in the rates they charge. It is also important that builders and utilities be allowed to continue to use brand names established for voluntary energy programs. Case in point, there are utilities that offer incentives if a homeowner puts in a ground source heat pump. These energy efficient systems are new, but expensive technology. A ground source heat pump can cost \$6000-7000 more than a standard residential unit. The utility pays for the well drilling, which is costly, and then oftentimes offers a rebate for the equipment to the homeowner. These kinds of incentives are important if new, innovative energy technologies are to become marketable. The economic pressures of retail competition will make it difficult for electric utilities to continue to recover rebates and incentives in their rates. This scenario could dramatically alter the strong relationship that has been built up over decades between home builders and their local utilities. Builders have worked jointly with their local utility for decades to make homes more energy efficient and more affordable to the average American. It is important that a mechanism is in place to maintain these incentive programs. The state of California, recognizing the need for these types of incentive programs, mandated public benefits funds be earmarked for such initiatives. There needs to be a concerted effort to preserve these benefits in a deregulated industry.

The building industry has found that technology innovation is very difficult and hard to market without incentives. Market trends have shown that there is less of an interest in energy efficiency when utility rates and bills are low. Incentive programs help spur the introduction of innovative technology into residential construction. Once these technologies take hold of the mainstream market the cost of the product will come down, therefore offering the consumer a cost effective and affordable product.

There are other ways incentives can be offered in a deregulation bill aside from continuing utility rebates and incentives. NAHB applauds Congressmen Largent (R-OK) and Markey (D-MA) for including energy efficient tax credits for new and existing homes in their electricity deregulation bill, H.R. 2050. Although NAHB has concerns with some of the levels of efficiency required for new homes to qualify for a credit, we believe these incentives are important if we truly want to move energy efficiency technology forward. In fact, NAHB strongly supports H.R. 1358, introduced by Representative Bill Thomas (R-CA). The legislation offers a tax credit for new and existing homes that meet higher energy efficiency levels. We would advocate this committee support H.R. 1358 and include it in any deregulation bill that moves through the committee.

NAHB has long supported voluntary energy efficient measures. Recently, NAHB's Research Center has been involved in the Partnership for Advancing Technology in Housing (PATH) program. So far the PATH program has been successful in spearheading new, innovative technology. The program links key agencies in the federal government with leaders from the home building, product manufacturing, insurance, financial and regulatory communities in a partnership focused on technology innovation for the future in housing. The federal government, understanding the importance of incentives, has funded the PATH program to speed creation and use of innovative housing technologies. NAHB's Research Center, in conjunction with PATH and Dow Chemical Company, is currently exploring home product applications for a new class of insulation technology that promises dramatic residential home energy savings. This is the type of technology advancement that can occur through incentives.

Conclusion

NAHB believes federal deregulation legislation must provide strong buffers against rising costs for the potential homebuyer. As I have outlined, this issue could have a profound affect on the lives of virtually every person who hopes to own a home. NAHB hopes that in any deregulation bill Congress will carefully address the impact of infrastructure costs and consider the importance of incentives for stimulating innovative technologies in a deregulated market.

Thank you for this opportunity to share our concerns on this important issue. I would be happy to answer any questions you may have.

Mr. BARTON. Thank you, Mr. Deless.

The Chair recognizes himself for the first rounds of questions, and I do not really have too many questions for this group.

I want to ask our homeowner representative and our home builder representative. Are your associations in discussions with the distributed power people, the fuel cell people, about how to integrate

these new products into your packages, homebuilding packages, your homeowner packages?

Mr. DELESS. I think there has been some limited discussion, but as you heard earlier they are really not available for commercial application at this point. I think they hold promise for obviously a business opportunity in the future when they become commercially viable.

Mr. BARTON. What about Mr. D'Alessio's product? Is that something that could be included in a standard new home in the future, some of that software that is put into place, and things like that?

Mr. D'ALESSIO. I do not think there is any question about it that it could be.

Mr. BARTON. Okay. Well that is really the only questions that I had.

I am going to recognize Mr. Hall.

Mr. HALL. Mr. Chairman, thank you.

My question I guess will be to Mr. Mertens. I have a district similar to the chairman's district in Texas where we have some larger cities, and then some rural areas.

How could distributed power be used in our district? We already have what we think are, our electric rates are too high, but they are considered low rates. You know, everybody wants a little bit lower rates. But we have pretty reasonable rates compared.

And one of our fears is that we will pass a bill here that will, as I have said before, lower them in New Jersey and raise them in northeast Texas, and we could not hardly live with that. As a matter of fact, I would be standing at the employment office the first November that came around after the President had signed this stuff.

We are served by OUs, MUNIs, Federal Power Co-Ops, what is the commercial viability of these technologies at the present time? What are they going to do for my district?

Mr. MERTENS. Congressman, first and foremost you are of course familiar with the ERCOT system, which is separate and apart from New Jersey, so I think you have preserved yourself as far as not shipping any power up there.

But focusing locally, distributed generation——

Mr. HALL. I've got to read Markey's part of that Markey-Largent Bill, though before I totally and completely trust that. Go ahead.

Mr. MERTENS. The distributed generation option I think is a fine option. Williams Company has aligned itself with a number of leading manufacturers—Caterpillar, Solar Turbines, and so on—with the express intent of customizing a solution to every user out there.

If a rural electric has a need for a peaking unit, a baseload unit, an isolated unit somewhere, that is the solution that will be drafted.

As far as the economics, that is where some of my earlier comments come into play. It is a complex issue. There is a desire on many parties to burden wires' charges, and then if a customer chooses to exit the distribution system, carry those fees with them.

That makes distributed generation in some cases less economically attractive.

If we could get past some of that and place the burden, the cost burden, where it properly belongs, then the solutions of keeping

low-cost power available to everyone are evident. It is just a matter of pushing the numbers, putting fuel in here, taking electricity out there.

Again, it is a variety of packages, depending on the solution you seek.

Mr. BARTON. Would the gentleman yield real briefly, Mr. Hall?

Mr. HALL. Sure.

Mr. BARTON. Do you see any reason to have any disconnect charge or connect charges? There would seem to be some need to have some fees for that, but do you share that? Or do you think it should just be plug and pay like we have in telephones now?

Mr. MERTENS. I think a stranded cost recovery mechanism is appropriate in some fashion to be determined. One of the key elements on any successful solution for distributed power is having access to the grid during periods of maintenance, during periods of peak demand, or in some cases just for flat-out base generation.

In all cases, we would always seek the lowest cost solution, and that does not always mean the distributed generation equipment is going to give it to you.

It may become that distributed generation is a peaker that benefits the whole system and is in fact entitled to reverse stranded costs because it benefits the utility.

It is, quite frankly, in the imagination of the drafters of the solution that I would put trust.

Mr. HALL. Mr. Chairman, I still have a little bit of time, don't I?

Mr. BARTON. Sure.

Mr. HALL. Mr. Mertens, you expressed the concern that varying utility standards would make it difficult to build a standardized distribution energy product.

Let's talk a little bit about the establishment of a standard and whether or not it takes legislation to do it. Would you expand a little bit on your testimony on that?

Mr. MERTENS. Certainly. I have participated in this type of activity so I can speak to it first hand.

While the public posture of some utilities is that we welcome distributed generation, with the other hand they also say, and by the way I just need this interconnection device which by the way costs \$200,000.

So in one way I am receptive, in another way I am not receptive.

As I go to 50 States, 300 various utilities, each utility today is entitled to protect their system in any fashion that they want, from a technical viewpoint. In doing so, there are some very creative engineers out there that not only go with belts and suspenders, but they also put sky hooks in place.

Those are some of the things that I believe in a national vision can be espoused and encouraged by different agencies, perhaps NERC, to minimize those.

Alternatively, as an example we have Better Homes & Gardens' seal of approval. If we got to the point of having a national data sheet and some sort of a national standard that everybody could say, yeah, that covers 99 percent of the cases, and come out with that, and then let everybody work toward that as an appropriate standard, that would be very comfortable.

But what is important is that not each utility be allowed the full discretion to overbuild.

Mr. HALL. Mr. Chairman, I thank you.

Mr. BARTON. Do you have another question?

Mr. HALL. I would yield back my time.

Mr. BARTON. Recognize the gentleman from Oklahoma, Mr. Largent.

Mr. LARGENT. Thank you, Mr. Chairman.

Mr. Mertens, I wanted to ask you a question about distributed generation.

What is the net effect of distributed generation if we were in a full-blown deregulated electricity arena and we had actively integrated distributed generation around the country, what would the net effect be on the transmission system in this country?

Mr. MERTENS. Certainly distributed generation can be tied into the transmission system, but most applications would tie into the distribution system; but my answer will respond to both.

In most cases, by situating a source of generation remote from a central generator, it can do nothing but help the integrity of the transmission or the distribution system. In many cases, not only will it help those systems, but it will defer costs of stringing new wires, installing capacitants, doing a variety of technical things to maintain system reliability.

Montreal, I think we all remember the terrible snow storm about 2 years ago, the ice storm. If distributed generation was in place during that period of time for some of the system, that terrible hardship that those folks lived through would have been vastly reduced.

Mr. LARGENT. Does distributed generation need to have backup that is connected to the grid?

Mr. MERTENS. Congressman, we can design DG in a number of ways. Depending on the side of the load, you could put multiple units in, and in that fashion assure reliability as good as the transmission system today.

We have a wonderful electric system, and so to try to duplicate that kind of reliability takes hardware.

Mr. LARGENT. Yes.

Mr. MERTENS. Ideally, you would put a single unit in place and then rely on the grid to provide you backup service during periods of maintenance, provide you backup service when the inevitable maintenance problem happens.

Mr. LARGENT. Let me come at this from a little bit different direction because you guys are going to be marketing not just to the United States but all over the world.

Mr. MERTENS. Yes.

Mr. LARGENT. And if we were to be able to back up 100 years and start over with developing a national grid, or an electric system like, well, truthfully, like a lot of Third World countries are in the condition they are in today, the grid probably would not look like it does today, given the technology of fuel cells and other distributed generation capacities or abilities. Is that correct?

Mr. MERTENS. I think that is a very accurate statement.

Mr. LARGENT. Well, Mr. D'Alessio, I wanted to ask you about iSoft. We had a chance to talk earlier, and some may have gotten

a misperception, and it might have been me, but from my understanding the software you are talking about, principally you are targeting at this time the utility companies and giving them the ability to do some unique software capabilities in terms of moving into this new arena as we move into deregulation.

Could you just maybe elaborate a little bit more on what exactly iSoft is doing and who you are marketing to?

Mr. D'ALESSIO. Certainly, Congressman.

Our initial target was the telecommunications industry. They were struggling with the issue of multiple services being provided to a single customer, and getting those issues onto one bill so the customer would receive one bill for that.

But also they were dealing with the ability to issue multiple different pricing plans for the same type of services.

A good example would be the cellular industry where you go and you pick out of nine plans the price plan you want for your cellular phone.

We envision that in the utility industry you are going to have choices like that eventually. It might be your electricity is free on Wednesday but the rest of the week it is at this rate. Or if you use up to this much usage, after that your rate goes down.

Software like ours allows utility companies to price the service to the user like that.

Mr. BARTON. The gentleman's time has expired.

Mr. LARGENT. Thank you, Mr. Chairman.

The gentleman from Ohio, Mr. Sawyer.

Mr. SAWYER. Thank you, Mr. Chairman. I would be pleased to yield 15 seconds to Mr. Shimkus if he wanted to make an observation to the Chair.

Mr. BARTON. Did the gentleman——

Mr. SHIMKUS. The observation has been made.

Mr. SAWYER. I reclaim my time, Mr. Chairman.

Mr. BARTON. Okay. We will start you over again.

Mr. SAWYER. Thank you.

Mr. Mertens, let me return to the interconnection standards. I think that is important.

Who ought to be making those determinations?

Mr. MERTENS. I think it is very important that each utility participate in that. There is a uniqueness to every electric grid out there, and it is critical that they are part of it.

However, there needs to be some oversight. I assure you that goldplating is not a lost art.

Mr. SAWYER. The quality of that interconnect, though, does affect the quality of the system at some point, would it not?

Mr. MERTENS. Yes, sir, it does.

Mr. SAWYER. You say that the utilities should participate. Are you talking about generator utilities, transmission utilities, distribution utilities? I am really concerned about what Mr. Tribone said earlier about the importance of watching our vocabulary because it puts us into mindsets that may not apply.

Mr. MERTENS. And you correctly observe, we have all three types out there. And then we continue to have the vertically integrated utility as well.

Mr. SAWYER. Sure.

Mr. MERTENS. The interconnect standard, in again different situations, if I have a small fuel cell, the interconnect standard there would be on the distribution level. If I have a larger unit of 250 megawatt solar, that would probably be a transmission interconnect.

So the answer is. It depends.

Mr. SAWYER. As we try to write law here——

Mr. MERTENS. Yes, sir.

Mr. SAWYER. [continuing] where should we put that authority? Should it be in voluntary associations of service providers of one kind or another?

Should it be overseen at the State level?

I mean, most of the kind of distributed generation that we are talking about really falls within what could be a traditional State purview.

Or should there be a fundamental set of characteristics that we would expect some kind of governance organization, whether public or private, to observe?

How should we write that law?

Mr. MERTENS. Congressman, you referred to the National Highway System earlier as a good analogy to the transmission system, and I agree with you. I think it is a marvelous example.

In the Highway System, we have certain standards. Bridges can be no lower than this. Roads have to be this thick. Curves are of such and such. And I think that is what is lacking in the electric industry.

We do not have the fence parameters in place yet. And with that, we can certainly work inside that fence effectively to take care of the local interests that are important to maintaining reliability. But we need that outside bracket so that if we do get an outlier we can bring that person back in.

Mr. SAWYER. Thank you very much, Mr. Mertens. I appreciate that.

Mr. D'Alessio, you talked about mergers and acquisitions.

Mr. D'ALESSIO. Yes, sir.

Mr. SAWYER. It is a complex and difficult undertaking these days going through a variety of jurisdictions of various kinds. That is probably the product of having built an industry up over the course of a century with various standards applying at various points in the century.

Where in a new world of restructured service should mergers and acquisitions' decisions be observed, overseen, and acted on in the public interest?

Mr. D'ALESSIO. Again let me fall back to our telecommunications experience. The company started out as long-distance providers. Then they acquired local carriers, ISPs, and possibly telecommunications getting into utilities.

Now what they have done is acquired established business bases. Each of these established business bases had their own infrastructure which they did billing out of customer service and a bunch of other projects.

The biggest problem was getting all of that together so there was one unified source of data, which basically comes down to data in-

tegration where an executive at one location can view the data from all these different sources.

It also relates directly to convergent billing: the ability for the one corporate organization that survives to be able to send out one bill. The savings is drastic. As opposed to sending out a bill for your cellular phone from one company, the long distance bill, the ISP bill.

These companies that have the software that we are talking about are able to generate one bill to that customer base for all those services.

The beauty of the software that is available today is that they do not have to lose their investment in their legacy system. The software rides on top of that. That is probably one of the nicest aspects of it.

Mr. BARTON. Thank you.

The gentleman's time has expired.

For the last series of questions, Mr. Shimkus, the long-suffering, very patient gentleman from Illinois.

Mr. SHIMKUS. Thank you, Mr. Chairman. It is an honor to be recognized.

Mr. SHIMKUS. Mr. Clark—

Mr. BARTON. The gentleman's time is about to expire, so—

Mr. SHIMKUS. [continuing] you brought up an issue that I just need to respond to. You kept talking about the stranded cost issue, and I think that battle has been fought and is over, and it is really a dead horse.

So I think you need to focus on how we can make the deregulation bill that we are going to push palatable. I mean, 23 States have moved. I am a rabid defender of what Illinois did in a very contentious, angry process by which not everyone walked away winners or losers, but they all walked away standing up and moving to a new environment.

But I want to follow up on the distributed generation aspects. And of course the chairman will understand, based upon my numerous questions on the States' involvement, but you brought up a good question that we are going to have to go back and do research on the Illinois bill.

In the Illinois bill, there are going to be transition costs for people who choose to leave their provider up until 2006. Do you think that transition cost—and I know you are not all experts on the Illinois legislation—would even pertain to distributed systems?

Mr. CLARK. I am not sure I know that much about distributed systems, but my point with the stranded costs, knowing it is a dead horse, is that since we paid for the horse we want to at least get some of it back.

So I think any further costs on the customers should be looked at—

Mr. SHIMKUS. Well I really want to talk on distributed systems, so I do think the stranded cost battle is now—

Mr. CLARK. I do not know that much about distributed systems.

Mr. SHIMKUS. Mr. Mertens?

Mr. MERTENS. Illinois, as have many other States through the stranded investment process, have allowed a wires' charge for customers exiting the system.

There is a variety of approaches to that, however. New Jersey, for instance, had a window where, if a customer elected to develop onsite generation, they were exempted from various charges under that circumstance.

And so the approach we might offer here is, again in the best interests of the State, the region, the customer, how might we craft a solution that is going to benefit them all.

Clearly a customer that builds onsite generation that has the ability to enhance the system by in putting power in a weak area of the grid, or in some fashion selling back on peak, under those circumstances there should be recognition of those benefits.

Presently, that is not part of the process. It is rare to find anyone even asked under what circumstance can distributed generation benefit, and should we pay for those benefits? That is not the question.

I offered in my opening a comment about retirement, plant retirements. You will see that in most cases when a plant is retired a new plant will replace it. But what if distributed generation, instead of a new plant, were offered and that new plant, that central generation were not put into rate base. Does that not have the ability to lower rates for all consumers?

I think the answer generally to that is, yes. And we need to explore that.

Mr. SHIMKUS. And I am going to have to recheck the Illinois legislation, because it would be exiting from one provider but not entering into a contract with another producer, except for yourself. So it brings up good questions, which is the importance of having hearings.

I thank the chairman, and I yield back.

Mr. BARTON. I thank the Congressman. We are going to conclude this hearing. This is our last oversight hearing on the general issue. Next Thursday we are going to begin our legislative hearings. And if the minority approves, we are going to hold the first legislative hearings on a number of the bills that have already been introduced, the Markey-Largent bill, there is the Cliff Sterns bill, there is the Burr Bill, we think there may be a Pallone bill. So we are going to give—and Mr. Tauzin perhaps has a bill in the hopper—we are going to take a look at the bills that have been introduced and give those members and groups a chance to come in and comment on those legislative items.

Then we are going to start a series of hearings on a bill that is currently being drafted that we hope to be working with Mr. Hall and other Democrats on in the next few days.

We want to thank you gentlemen for this testimony. There may be some written questions to you, and we hope you will reply very quickly to that.

This hearing is adjourned.

[Whereupon, at 12:21 p.m., the hearing was adjourned.]

THE ROLE OF THE TENNESSEE VALLEY AUTHORITY

MONDAY, SEPTEMBER 13, 1999

HOUSE OF REPRESENTATIVES,
COMMITTEE ON COMMERCE,
SUBCOMMITTEE ON ENERGY AND POWER,
Nashville, TN.

The subcommittee met, pursuant to notice, at 9:29 a.m., at 16 Legislative Plaza, Nashville, Tennessee, Hon. Joe Barton (chairman) presiding.

Members present: Representatives Barton, Whitfield, Pickering, Bryant, Hall, and Gordon.

Also present: Representative Clement.

Staff present: Joe Kelliher, majority counsel; and Sue Sheridan, minority counsel.

Mr. BARTON. The hearing will come to order. Ladies and gentlemen, take your seat.

I am Congressman Joe Barton from the Sixth District of Texas and I am delighted to be in Nashville, Tennessee today to hold a formal field hearing of the Energy and Power Subcommittee of the Commerce Committee, U.S. House of Representatives.

Our hearing today is on the role of the Tennessee Valley Authority in competitive electric markets.

I want to thank Congressman Ed Bryant of Tennessee for helping us to arrange this hearing and arrange the hearing room through the good graces of the Office of the Speaker of the Tennessee Legislature, the Honorable Jimmy Naifeh.

And I want to thank Congressman Bob Clement, another great Congressman from Tennessee, who is not on the committee, but is a good friend of mine and is on another committee that is going to be holding a hearing on the TVA in the next 2 weeks in Washington. Also Congressman Bart Gordon, a member of our subcommittee, for also helping us to arrange this hearing.

I am delighted to be back in Nashville. I have come here numerous times. Back in 1864, there was another group of Texans commanded by General John B. Hood, who came to Nashville. They had a pretty warm welcome. Congressman Hall and I hope that our welcome today is not quite as warm as General Hood's was back in 1864, but we know that we are going to have a very productive hearing. I had the honor to represent Hood County, which is named after General Hood, in Congress until 1990 when we had Congressional redistricting.

I think most of the people in this room know that we are working on this subcommittee to put together a comprehensive Federal elec-

tricity legislative package. We want to promote competition throughout the country in electric markets, we want to enhance reliability, but we also want to respect the role of the States.

With regard to the Tennessee Valley Authority, since it goes over numerous States and has special Federal legislation that deals directly with it, we feel that it is worthy of special consideration and that is why we are here today.

As we put our package together, we are considering a broad range of issues, including what the role of the Federal electric utilities like TVA should be in a competitive electric market. The discussion draft that is currently in circulation includes provisions specifically relating to Bonneville Power Administration and other Federal power market administrations such as the Southeastern Power Administration. I have worked with Congressmen from those regions served by those utilities to fashion those provisions, but we do not have in the current draft anything other than a title for the Tennessee Valley Authority.

I had promised Congressman Bryant and Congressman Gordon that we would work with them to fashion a package specifically tailored to the TVA, but I want to tell the witnesses and those in this room that I think it is imperative that we have a TVA package in our bill. And I know there is a special relationship between the Tennessee Valley Authority and the U.S. Congress and the State legislatures in the regions that they serve, but I do not think that the TVA can be out of a comprehensive electricity bill. We need a bill that serves all 50 States, not just all 50 States minus the States that are served by the TVA.

The key question is how to incorporate the TVA system into the national power grid. This hearing is very important because it will help the subcommittee determine whether we should and how we should include TVA provisions in a bill. If there is a broad agreement that the Federal electric legislation should include TVA provisions, we must decide in the next 2 weeks, quite frankly, what the elements of that package should be.

So today's hearing is not just a hearing for show and tell, today's hearing is a substantive hearing that in all likelihood is going to result in Federal legislation that passes my subcommittee within the next month.

I want those of you here that have been working to put together a consensus on how to handle the TVA issue to continue to work with your Congressmen in the region. We would like a consensus, if at all possible, to come from this hearing. The region, in my opinion, should have a lot, if not total, input into what the TVA provisions should be. It is obviously helpful if you can speak with one voice.

The Tennessee Valley is well represented on the subcommittee. As I've already pointed out, Congressman Ed Bryant, Congressman Bart Gordon are both from Tennessee. Congressman Ed Whitfield is with us today, represents the great State of Kentucky. Congressman Chip Pickering of Mississippi and Congressman Rick Boucher of Virginia, who I do not believe is with us today, but is a member of the subcommittee.

As I pointed out earlier, the region is also well represented by Congressman Bob Clement, who is with us. He and I worked to-

gether several years ago on the nuclear licensing reform legislation. We have a tremendous personal friendship and he has already told me that he wants to be a key player in this as this bill hopefully moves to the floor of the House of Representatives. He is on the Water Resources Subcommittee of the Transportation and Infrastructure Committee and as I pointed out earlier, they intend to hold a hearing on this same issue within the next 2 weeks.

I also encourage the region to be mindful of the point of view of the rest of the country. It is going to be very difficult to pass TVA legislation that is embraced by the Tennessee Valley region but opposed by the rest of the country. The biggest issue, in my opinion, to the rest of the country is going to be whether the Tennessee Valley Authority provisions expose Federal taxpayers to too much risk, particularly with respect to the payment of the TVA debt.

One reason that I think Congress should include a TVA provision in the Federal electricity legislation is to correct a mistake that was made in 1992. Congress left the TVA out of the Energy Policy Act of 1992. Under the 1992 law, there is wholesale competition in every part of the country except the Tennessee Valley. I think that that is wrong. The time has come to give TVA's wholesale customers the same right to purchase electricity competitively that wholesale customers outside of the Valley have enjoyed since 1993.

I want to commend the TVA for listening to its customers and agreeing—at least I am told that they have agreed—that the time has come for competition in the Tennessee Valley also.

I look forward to hearing the testimony of the witnesses today and the questions and the answers that are going to come after the testimony.

With that, I will recognize our ranking member of the subcommittee, Congressman Ralph Hall of Rockwall, Texas, for an opening statement and then we are going to go to Mr. Gordon, who has indicated that he may have another engagement that he might have to leave our hearing prematurely.

Mr. Hall.

Mr. HALL. Mr. Chairman, I will yield to Mr. Gordon now if he needs to leave.

Mr. BARTON. Can you kind of push the little red button and hold the microphone.

Mr. HALL. You have to push it and hold it.

Mr. BARTON. Tennessee is very smart, you can do more than one thing at a time.

Mr. HALL. We can just talk with one hand, I guess.

Mr. Chairman and members of the committee, thank you for your presence here today. And we are here at the invitation of the members of the delegation from Tennessee, a delegation that the chairman has already indicated that the two of us as Texans have high regards for. I never met anybody from Tennessee that I did not like. Maybe I will have a new experience while I am here, but the only one that is not here that is a close friend of mine there is John Tanner, who lives in the same building with me in Washington and he is a leader of the Blue Dog organization, a group of conservative Democrats that are courteous to the Democratic leadership and the Republican leadership, but we just do not let them boss us around. You know, we could survive so long as there is a

close distinction in the numbers up there, but once one party gets numbers beyond 30 or 40, why we will have a shoe factory built, you know where. But we enjoy doing what we are doing.

I enjoy working with your Tennessee delegation. I think first I should recognize Bob Clement, who represents the area here where we are and have kind of an understanding and agreement with him. He keeps telling me he is not going to run for Governor or he is going to run for Governor. But if he ever does, I think he is going to get elected and I have asked him to have a Sam Houston Room to where I could sleep in the Sam Houston Room. Whatever he is going to charge me for it, we will work that out at a later time. I understand people pay to sleep in those important rooms and—Bart Gordon is on committees, we are on the same committee I guess on two committees together. Bart has just recently—ranking on Space—led the fight to save the space station that might mean medical breakthroughs for us in the days ahead—one of the fine members.

But it is hard for me not to like anybody from Tennessee because a lot of settlers from Texas came from Tennessee and I think your State gave birth to some of our most distinguished early revolutionaries and statesmen, Davy Crockett and Sam Houston, being two that I could mention right off. Davy Crockett said—the last time he spoke to the Congress, he said the same thing I tell them every weekend in Washington, y'all can go to hell, I am going to Texas. And that is in the Congressional Record, if you ever want a copy of it.

And Ed Bryant, I have no more respect for anybody in Congress than I do for Ed, the very courageous and successful effort he put forth during the impeachment proceedings, doing what he felt was right and showed great leadership there, I think places him in a place of honor and respect by all of us, whether we agree with the thrust or not. I agreed with the thrust he took, but some of us did not, and there was reasons to be on either side of that issue.

And these other members here, we are honored to have them. Chip Pickering, I do not really trust anybody as young as he is, but he is an extra hard worker and really part of the backbone of this subcommittee.

Mr. Whitfield gives us a reasons base. He thinks things through, you are not going to sell him anything, he is very solid, very thorough and very capable.

So I am honored to be here with this group. I am over-matched, but I just try to hold my own. I came here to listen and I think there is widespread agreement, Mr. Chairman, on what we are attempting to achieve with utility restructuring at the Federal level and that is the development of a workable competitive electric bulk power market which makes some sense. Now where many of us differ is on how to execute the transition to make that vision a reality. So in many ways, what we are attempting to do is to write the transition rules that will affect one of the largest industries in the country, and we understand that and we have to be careful with that and we have to be thorough with that. With an industry as basic to the economic health and welfare of this country, we cannot afford to make a mistake.

That is the reason that this may happen this year, it may not. I think I am almost for restructuring anything or deregulating. As much as we can take out of Washington and bring to the local area, I want to do it, if we can do it sensibly. By some measures, TVA is the nation's very largest electric utility and since TVA is a Federal corporation, accommodating it within the giant transition rule is some unique issues that are present with us and certainly we know that these issues do present a major challenge as we attempt to put together legislation on this committee.

So I am here to listen carefully and learn first-hand, and our job is to hear the concerns about the changes. This is not the first hearing we have had, we had a hearing in Atlanta, we had a hearing in Chicago, we had a hearing in Dallas. We even had a hearing in Richmond, Virginia. I do not know how that one happened, but Chairman Bliley resides in Richmond and we had a national hearing in Richmond. And we have had I guess 115 or 20 people testify before us. We are seeking the truth and we are trying to write a bill that you can be proud of and that this country can live with.

Mr. Chairman, thank you for your courtesy and your help and I yield back my time.

Mr. BARTON. Thank you, Congressman.

I want the audience to know that there was one word there that said Sam Houston and he talked for 5 minutes. It is just amazing what Congressman Hall can do with a little bit.

And I mean that in a positive way.

Mr. HALL. Mr. Chairman, could I be heard?

You know, things are not always like they seem. Back when I was in the Texas Senate, we had a young man named Mark Connally, who was John Connally's son. Everywhere Mark went around, he would tell people I am John Connally's son. He is talking about me now but Mark talked about himself—I am John Connally's son, I am John Connally's son. And Nelly Connally got him off to one side and said I doubt if people want to hear that and I doubt if it makes you any bigger person and I doubt if your daddy wants you going around bragging like that. Of course, the next reception they had, Mark showed up there and somebody walked up to him, shook hands with him and said son, are you not John Connally's son and he said well, I thought I was until momma said she had some doubts about it.

So you have to be careful what he says about me because our districts border, he took the super collider away from me, built it in his district up to a point and we finally killed that.

I yield back my time.

Mr. BARTON. We would like to hear from Congressman Bart Gordon now.

Mr. GORDON. Thank you, Mr. Chairman, and Ranking Member Hall, my friend from west Tennessee, Ed Bryant, and our friends from north of us, Ed Whitfield and south, Chip Pickering, thanks for coming to join us today. Our good staff, folks that are going to testify today, and guests. Bob Clement and I want to welcome all of you to the center of the universe here in middle Tennessee, we are glad you have come to join us.

As Chairman Barton mentioned, I had two previous really committee meetings today, one of which Ed and I serve on. He stood

in for me last Friday and so I am going to—he is going to take the hearing here and I will stand in for him at the other one, but I will be getting back with our staff to go over all of this.

Also, as I was leaving the other day, Zach Wamp, who could not be here, wants to be here, Zach is our former Chairman of the TVA Caucus and has asked me to place his testimony in the record.

Mr. BARTON. Without objection, so ordered.

Mr. GORDON. Thank you. As well as my friend Carl Landsen, who is the Vice President of the International Brotherhood of Electrical Workers. Carl also served on the Tennessee Valley Electric System Advisory Committee and he has a testimony and a report of the Tennessee Valley Electric Advisory Committee that he would like to place as part of the record.

Mr. BARTON. Without objection.

[The prepared statement of Carl Landsen follows:]

PREPARED STATEMENT OF CARL LANDSEN, INTERNATIONAL VICE PRESIDENT,
INTERNATIONAL BROTHER OF ELECTRICAL WORKERS

Mr. Chairman, members of the Committee, welcome to the beautiful Tennessee Valley and I should like to thank you for the opportunity to address the Subcommittee on the important subject of utility re-regulation. My name is Carl Landsen and I represent several thousand inhabitants in the State of Tennessee and other states who are vitally interested in the electric re-regulation bill before the Congress and its impact upon the Tennessee Valley Authority and the 159 distributors that TVA serves.

In 1997 a Tennessee Valley Electric System Advisory Committee was created from stakeholders in the Tennessee Valley River Basin relative to changes in the electrical generation and distribution industry. The Advisory Committee was charged to create and/or develop a consensus among regional stakeholders for a legislative proposal to define the role of TVA in the re-regulated electrical industry. That Committee had several meetings in Nashville, Tennessee. In March of 1998 the Committee concluded its mission and issued a report. I shall submit a copy of that report for your consideration.

The circumstances in the Tennessee River Basin have not changed since that Committee spent months analyzing the impact of re-regulation upon the inhabitants of the Tennessee River Basin and the role that the Tennessee Valley Authority should engage in such a re-regulated market. Inasmuch as the committee and staff from the Department of Energy spent several months analyzing and discussing the needs of the inhabitants of the Tennessee River Basin and the role that TVA should play in accommodating those needs as a country, I respectfully request that the Committee give due regard to the development of the Advisory Committee's Report. Moreover, I respectfully request that the Committee take cognizance of the fact that the terrain in the Tennessee Valley region is somewhat different from that found in other parts of the country and oftentimes it is not economically feasible to provide an individual dwelling electricity. Prior to May 18, 1933, there was indeed electricity generated and sold in the Tennessee River Basin, but many of the inhabitants in the River Basin were without the benefit of electricity because the investor owned utilities, more specifically the Tennessee Power Company, would not provide service to those individuals who resided outside of a metropolitan area. The reason they refused to do was quite simple—the cost of delivering such power. It is no more feasible today in some areas of the State of Tennessee and the Tennessee River Basin than it was in 1933 from an economic standpoint. I urge the Congressional Committee to remain cognizant of that as they engage in debates over the wisdom of re-regulation or more specifically how such re-regulation will be framed. It is my belief that the Tennessee Valley Electric System Advisory fulfilled its obligation commensurate with its charge. I urge members of the Committee to analyze in detail the report enclosed herewith.

One final point I should like to make before the Committee: the inhabitants of the Tennessee River Basin are entitled to equitable treatment as it relates to the operation and funding of a navigation system and/or flood control of the fifth largest river system in the United States of America. Throughout our great country from Maine to Washington State, the federal government funds the operation and structuring locks to maintain a navigable channel. The inhabitants of the Tennessee

River Basin and the seven state area that it covers are entitled to no less. Most assuredly, requiring the Tennessee Valley Authority to use revenue garnered from the sale of electricity would put the Tennessee Valley Authority and the inhabitants of the region at a distinct disadvantage when it comes to the generation and sale of electricity should those revenues be used to fund and operate navigable streams contrary to the practice throughout the country.

Ladies and gentlemen of the Committee, I thank you for the opportunity to appear before you in Nashville, Tennessee, this morning. Enjoy your visit. Good luck in your deliberations and have a safe trip back to Washington or home.

Mr. GORDON. Thank you, Mr. Chairman.

You know, since you and our ranking member are both from Texas, Jim Baker remembers my grandfather well, and my grandfather used to always say that every time the grand jury met, the population of Texas increased. And some of those were my relatives too, so we are glad that you have come back to your roots here.

Mr. BARTON. Will the gentleman yield?

Mr. GORDON. Yes, sir.

Mr. BARTON. My great, great, great Ben Barton came to Texas in 1840 from Tennessee, managed to get legally married and father one son, Waddy Thompson, Sr., and then was killed under mysterious circumstances.

So he did come from Tennessee though.

Mr. GORDON. Well my first name is Barton and that is my mother's maiden name and part of our family went out there, so we—we are not kissing cousins, but we are related some where, I would suspect.

Earlier this year, Chairman Barton began the difficult task of trying to craft Federal legislation to deregulate our country's electricity industry. As many States across the country have started to move toward restructuring themselves, this subcommittee has moved slowly, hoping to build a consensus. I commend the chairman for his discretion. Because deregulation should have such a profound effect on middle Tennessee, I sought and secured a seat on this subcommittee to be a part of the conversation concerning deregulating our electrical industry.

In this process, there are three priorities that I have consistently expressed my support for and concern about.

First, ensuring that our lakes are not sold and are open to the public.

Second, maintaining this region's low electric rates.

And third, working to strengthen rural electrification and universal service for all rural areas.

When we in Tennessee were drawn into the conversation about restructuring, it was not limited to electricity. TVA and the Southeast Power Marketing Association also fills important non-power roles in Tennessee—flood control, navigation, land management and recreation. In middle Tennessee, we are fortunate to be beneficiaries of some of the most beautiful lakes in the country. These lakes, which are on the Cumberland River, are owned by SEPA and maintained by the Army Corps of Engineers. Any effort to overhaul the Power Marketing Administration, specifically SEPA, could limit access to these lakes. The people of Tennessee and the country should not have these resources taken away from them. Already this year, proposals have once again been offered to sell SEPA and our lakes in middle Tennessee. I strongly oppose such

proposal and will oppose any restructuring legislation that does not maintain open access to our lakes or does not keep them in the hands of the public. I am committed to fighting any efforts to sell our lakes.

We in Tennessee are the beneficiaries of low-cost power. This low-cost power is partly responsible for our continued economic growth. If we are to move forward with a bill in the 106th Congress, it is my hope that we have no losers, only big winners and bigger winners. The consumer must be our first priority. Any legislative proposal must work to reduce costs for all consumers in all regions of the country, including low-cost regions.

As we are here in my home in middle Tennessee, let me take a few moments to tell you a little bit about my district which includes 15 counties and a portion of Nashville and is south and east of Nashville. My home town of Murfreesboro receives its power from the Middle Tennessee Electric Membership Cooperative, represented here today by their President Jim Baker. The co-op serves over 120,000 customers in four counties. The cooperatives and the municipalities should be congratulated for bringing electricity to rural areas. In fact, my parents' farm had power brought to it by the local cooperative. And I want to make sure that rural areas will not be neglected in lieu of areas that are easier and more profitable to serve. It is no secret that it is more cost-effective and profitable to serve New York City than it is Lascassas or Red Boiling Springs. Rural electrification has been successful but our work is not complete. We must ensure continued access to affordable, reliable power for rural areas.

Now I have always found that the best way to get things done is to use the common sense approach to finding a consensus. If a deregulation bill is to be successful, it must provide some benefits to all.

Thank you, Mr. Chairman, for holding this hearing and letting me be a part of it today.

Mr. BARTON. Thank you. I will tell one quick story about Congressman Gordon. He and I were elected the same year. He was from Tennessee, I am from Texas. His first name is Barton, my last name is Barton and the President at the time was Ronald Reagan, who did not have the best history of a good memory, and there was an early vote and I was on one side with the President and Congressman Gordon was on the other side against the President, and it was of such significance that the President's wife, who has a very good memory, Nancy Reagan, was incensed about it, but she thought that I had voted against the President and so the President called Congressman Gordon, who had just left his office and was on travel, but the staff did not tell the President's secretary that Congressman Gordon was not in the office, and so Mrs. Reagan was doubly incensed because she felt that not only had the Congressman voted against the President, but had snubbed him by not taking the call. But she thought it was Congressman Joe Barton that had done this, not Congressman Barton Gordon.

And so I was at a White House reception, innocent lamb that I was, and Mrs. Reagan came up to me and just started ripping me, you know, and I could not figure out what it was. And we finally unraveled the mystery, and so the next time I was allowed in the

presence of the President, Mr. Reagan, I said Mr. President, would you please tell your wife that I am Joe Barton, not Barton Gordon.

So whatever the deed was, I am sure Congressman Gordon was representing his constituents, but he never incurred the wrath and I did.

We would now like to recognize Congressman Ed Bryant, who early on in this process I went to and asked if he would take on the unenviable task of trying to work to develop a consensus on the TVA issue, and Congressman Bryant said he would be—well, I do not want to overplay it, he did not say he would be delighted to do it, but he did say that he would do it, and he has done an outstanding job in trying to bring some clarity to some of these issues. And later this week, we will sit down with he and the other Congressmen from the region to try to put the package together.

Congressman Bryant.

Mr. BRYANT. Thank you, Mr. Chairman, and I would like to express publicly my appreciation for the courtesy that you have given all of us in the Valley by having this field hearing in Nashville. I want to tell you publicly what a great job Joe Barton is doing in this subcommittee chairmanship, especially as it relates to this issue of what some call deregulation, what others call restructuring, of the electricity industry. He is certainly giving everyone a seat at the table and ample opportunity to give our views and to represent our constituencies and we are continually assured by both he and others on the committee that this will be a fair hearing. Whatever type of bill we end up with, we want it to be the type of bill that will be a bipartisan bill, that will be a fair bill to all concerned and certainly we are in the early stages of this process, but yet we are moving, we are operating under some time guidelines here and so no one knows what the end result will be, but the process is beginning to move along.

I also want to thank the chairman of the full committee, Tom Bliley, for his role in allowing this subcommittee hearing to be held today. I also want to thank the ranking member, which some of you may not know who that is or what that is, but the ranking member of course is Mr. Hall, who is here, he is the senior Democrat member on that committee and he and Mr. Barton—it is like a Texas love fest when you go to the hearing and they get, as they did today, the first two statements. I just sit back and think again of the heritage that Tennessee has given Texas, and of course that balloon was popped today when Bart spoke about the folks under indictment going down there.

But they have become good citizens down there, I can say that much. But it is a pleasure to serve with such fine people on the committee, many of whom are here today—Ed Whitfield, Chip Pickering, Bart Gordon, and of course, Bob Clement is not on this direct committee, but again is a dear colleague from our delegation in Washington.

I think we have thanked just about everybody other than the panel members, and I know there will be a more elaborate introduction of each one of you as soon as we all stop talking up here, but this is the way Washington works and the hearings work up there, and I am sure those of you that observe Nashville, it is probably very similar to the State hearings that occur in this very

room. But I will not go through each one of the individual presenters today, but we have a very qualified, very competent panel to testify, certainly on different areas, different interests, and you probably will sense some disagreement among some of the people here today. But we all have a lot at stake in this and I appreciate all of you coming today and appearing here in Nashville for us.

Many of our other colleagues, both on the subcommittee and the committee and the TVA region itself, from the TVA Caucus, had other commitments and could not be here today. Bart has already mentioned Zach Wamp, who is the former Chairman of the Caucus, who has submitted his statement. Also Roger Wicker, who is the current Chairman of the TVA Caucus, had prior commitments but either is sending a statement or has a representative here at this hearing—and I am not sure which it is, but I feel Roger's presence already, so I know it is here. He is an old roommate of mine in Washington, so I know him very well.

But I would, Mr. Chairman, if it would be permissible for a few days to leave the record open so that any of our other colleagues might submit statements if they want to do so.

Mr. BARTON. Without objection.

Mr. BRYANT. Thank you.

Mr. Chairman, I really cannot underestimate how vital an issue this is, this issue of restructuring, to our region. For over 60 years, the TVA has generated our power, has made our rivers navigable, they have provided flood control, they have provided recreation, and they have contributed to the overall economic development of this entire region. I hope that this hearing will point to ways in which we can begin to look at reshaping the electric industry while preserving the historic role and functions of TVA. I agree very much with my colleague from middle Tennessee, Bart Gordon, about our priorities in this region and how important these are that we ensure a continuity of this, not only tradition, but this way of life that is so important to this region.

I want to ensure that—as we consider this national electricity restructuring legislation—that we do not forget the needs of the people of this region. And as such, I would echo Bart's words as he spoke them.

As other areas of this nation evolve toward retail electric competition, we are beginning to contemplate what benefits could be derived from wholesale electric competition that the rest of the country enjoys. And I am committed, as well as others in this delegation, to ensuring that the people of the Tennessee Valley region are not forgotten in this process, and that all of our people continue to enjoy access to relatively inexpensive, very reliable power. In fact, I have told many of you that we have kind of become spoiled in this region. And from a political standpoint, that is going to be a hard thing to overcome when we have had really a tremendous system working in this area in terms of providing inexpensive, reliable power for years.

I believe that all of us here today understand the magnitude of this undertaking, and that, in the end, we can all come together to craft the best solution for the long term benefit of our beloved region. And I would yield back my time, Mr. Chairman.

Mr. BARTON. Thank you, Ed, we appreciate that.

We would like to next hear from the Honorable Ed Whitfield from the great State of Kentucky, who, as Congressman Hall pointed out, is one of the very, very thoughtful members of the subcommittee and who has taken a real personal interest in the TVA issue. Mr. Whitfield.

Mr. WHITFIELD. Mr. Chairman, thank you very much. And I want to thank all of you in the audience who are attending this hearing today.

We recognize the importance of it and I for one have been particularly impressed with Chairman Barton and Ralph Hall's willingness to listen to all sides on this issue. I have only served in Congress for 5 years, but I quickly discovered that frequently legislation will be put out there to the committee and no one has very much say-so about it at all. And Joe Barton, I must say, has been open and willing to listen and is honestly trying to come up with a compromise bill.

Obviously this is an important hearing. If we are not successful in crafting a TVA title that protects low-cost electricity rates and meets the economic development needs of our area, we run the risk of abdicating that responsibility to legislators who represent districts with high electricity costs and who do not have access to Federal power like TVA or the Power Marketing Administrations. I can assure you that any title about TVA crafted for our region by legislators outside our area would not benefit our residential, industrial or commercial users.

Now unlike Tennessee, not all of Kentucky is located in the TVA service area. In Kentucky, 5 electric co-ops and 13 municipal systems receive power solely from TVA. Of those 18, all the co-ops and 10 of the 13 munis are located in the First District of Kentucky, which I am honored to represent.

Federal power supplied by TVA and the Southeast Power Marketing Administration is an important energy source for our area and Kentucky, where we enjoy some of the lowest electricity rates in the nation. And I would further say that over 95 percent of the electricity supplied in Kentucky is coal-fire generated. I think all of us that come from coal-producing areas are going to be paying particular attention to any renewable provisions in this legislation.

Throughout the Tennessee Valley, there is genuine concern that comprehensive deregulation may result in higher rates. In Kentucky, a task force has been appointed to study the impact of deregulation on Kentucky's electricity consumers. That task force is scheduled to submit its findings at the end of this year, although I have been told that they may only recommend a continuation of the task force and not submit any substantive State legislative changes.

If the time to act on comprehensive electric deregulation legislation is now, my goal is, and has always been, to make every effort to protect our area from higher electric rates, which may result from increased regulation of Kentucky's power suppliers and distributors.

I look forward to our distinguished panel of witnesses today and want to thank everyone for your participation.

Mr. BARTON. Thank you, Congressman Whitfield. Did Congressman Bryant want—

Mr. BRYANT. Mr. Chairman, if you will yield just 1 additional minute. It is in my notes and I neglected that, but I did want to recognize representatives here from our two United States Senators. Both Senator Frist and Senator Thompson are represented in these hearings today and I very much appreciate their effort to be here today and what their bosses will apply to this bill when it is in the Senate side.

And I thank you.

Mr. BARTON. Thank you. I would now like to hear from Congressman Chip Pickering. He is actually the oldest member of this panel, but he drinks a special Mississippi water and he has a wife who went to Ole' Miss and that combination makes him look a lot younger than he really is.

Mr. PICKERING. Thank you, Mr. Chairman. You know, she is actually from Memphis, so that maybe the Tennessee coalition makes that possible.

It is good to be in Nashville, it is good to be in the Valley and I want to thank the chairman, commend the chairman for his leadership on this issue, his openness in the process, his willingness to come to Nashville and to the Valley and to work with those members that represent the TVA region. He has given us a unique opportunity to shape and influence this legislation and I hope that we seize that opportunity and are responsible stewards with the opportunity the chairman has given us.

He talked about General Hood coming from Texas during a time of conflict, and we learned a painful lesson at that point, that peaceful political process is always preferable to armed conflict and so some hundred and something years later, we have filled our nation's institutions—the Congress, the Presidency, the Vice Presidency—with southerners. Our committee is led by Chairman Bliely. We have the majority leader in the Senate from Mississippi, the next Chairman of Appropriations, Thad Cochran, will also be a strong advocate. The political leadership that we have from our region, I would simply like to make the point that now is our time to influence and shape the policy in a way that benefits and reflects our region. And if we lose this opportunity, you never know when the political winds may shift and when the positions that we now hold as a regional perspective may be lost. And I do not want to wake up 5, 10 years from today, much like we are now looking at the 1992 Energy Act and saying we lost an opportunity to move with the rest of the country toward wholesale competition and now we are constrained and restricted in a way that could lead to a comparative or competitive disadvantage for our region. We want to make sure that we take this opportunity while we have the influence, seize it, and make sure that we can respond with the flexibility and the strategic means possible to make sure that our region continues to have the low-cost competitive economic advantage that we enjoy today.

There was a speaker at an economic development conference in Mississippi several weeks ago who was saying that the demographic projections showed that our region, the south, will have 40 percent of the nation's population by 2040, we are the growth region. So if we are going to maintain the leadership and see the economic opportunity and development that we believe is possible,

then this is an extremely important component of being able to find the right policy with the right leadership that makes sure that we can enjoy that.

Mississippi and Tennessee has enjoyed a good relationship over time, although there is a constant jockeying over whether Mississippi or Tennessee gets more or less. And we want to make sure that Mississippi is reflected well on the board for TVA. We also worked well together, Roger Wicker is the Chair of the TVA Caucus and we made a deal last year, as you all know, TVA did extremely well in the appropriations process, the debt refinancing, the non-power appropriations, much to the dismay and chagrin of maybe members from other regions—TVA did extremely well, but there was a price that had to be paid.

We said okay, we will give TVA this opportunity but you have to give us Coach David Cutcliff and Eli Manning at Ole' Miss. And so we are enjoying the success that will come from a good Tennessee coach.

I do look forward to the hearing and to the panel and to the testimony today. I think we do have one of those rare opportunities to do what is right and what is good, not only for our region, for our country and I encourage all stakeholders, TVA, distributors, members, competitors to find that balance that can maintain the leadership that we have enjoyed in our region and that we are beginning to enjoy, that we can make a TVA that fits not only the 20th century of what it did to build our region, but fits the 21st century that will maintain our competitive advantage over the long term.

With that, I yield back.

Mr. BARTON. We would like to remind our audience that this legislation hopefully will have great support from this region, but it also has to have the support of the gentleman from southern Illinois, Mr. Hastert, and the gentleman from South Dakota in the Senate, Mr. Daschle, if it is going to be bipartisan—biregional I guess we should say.

When you were talking about settling things by the political process as opposed to on the armed battlefield, our next speaker, Mr. Clement, reached over to Ralph Hall and said “yeah, it is better to do it by political process, if you lose on the battlefield.”

Spoken like a true Tennessean. That is why Davy Crockett ended up in the Alamo and did not stay with Sam Houston who waited until the time to fight was a little bit better.

But our next opening statement is one of the most genuinely just decent guys in the Congress and that is Bob Clement. He and I worked on the nuclear licensing reform package where we had to take on quite a bit of vested political power on the House floor. And because Bob was just such a gentleman, we were able to defuse some of the venom of that issue and win at the time what was felt to be a very surprising victory. So I give a lot of credit to his good wishes.

And to my knowledge, Congressman Clement is the only Member of Congress who was there at opening day of Disneyland with his father, who at the time was the Governor of the great State of Tennessee back in the 1950's.

With that, Mr. Clement, for an opening statement.

Mr. CLEMENT. Thank you, Mr. Chairman. And I might share with you all, we have got a former U.S. Senator in the audience, Senator Harlan Matthews, who served us ably as U.S. Senator. Good to have you here, Harlan, very much.

Mr. Chairman and Mr. Hall, I want you all to know our favorite expression in Tennessee, "if it had not been for Tennessee, there would not have been a Texas."

And to Congressman Pickering and Congressman Whitfield and Congressman Ed Bryant, Congressman Gordon that has already left, it is great having you all in Tennessee. And as you all know, I am a former member of the TVA board, I served when President Jimmy Carter appointed me to the TVA board, when Bill Jenkins, of all things, our colleague, resigned and I took his place. And I am the first TVA director ever elected to the U.S. Congress. But since that time, as you all know——

Mr. BARTON. Did they consider that a step up or a step down?

Mr. CLEMENT. Oh, it is a step up, I believe.

But I want all of you to know this is very important to all of us. We have got some excellent people that will be testifying. And where better to discuss the future of TVA in a deregulated electricity industry than here in the heart of the Tennessee Valley. And while I am not a member of the Commerce Committee, I am honored to join you today. I serve on the House Transportation and Infrastructure Committee, which is the jurisdictional committee of TVA and we will be hold a similar hearing on TVA next week in Washington, DC.

When it comes to deregulation, I can only support a bill that will treat the Tennessee Valley area fairly. It must protect ratepayers and the economic development of the Tennessee Valley region, period. Over the years, Tennesseans have benefited greatly from the reliability and stability of the TVA power system, and the last thing I want to see happen is any legislation that jeopardizes our economy.

For many months, staff from the TVA Caucus, the distributors of TVA power, the Tennessee Valley Public Power Association and TVA have worked together trying to hammer out differences and forge consensus on just what TVA will look like in the future. I am proud of the progress that has been made and know we still have some hurdles to overcome.

As we in the Valley and in Congress work in the electricity industry restructuring, I want to offer my assistance to this committee, the distributors of TVA, to TVA and our entire region. I will do everything in my power to make sure the residents of the Tennessee Valley area get a fair deal in any Federal legislation.

It is just great having you here and we do have a great committee here and some great people. I know we all talk about politicians and all, but I will tell you, we have got some great people in Congress, Democrat and Republican alike, that really care about this country and care about its future.

Thank you.

Mr. BARTON. Thank you, Congressman Clement.

We now want to welcome our panel, we do have a very distinguished panel and it represents a cross section of the interest in

the region concerning consumption of power, the generation of power.

We are going to first hear from Mr. Mark Medford, who is Executive Vice President for Customer Service with the Tennessee Valley Authority. He has testified in Washington.

After him, we are going to hear from Mr. Jim Baker, who is the President of the Middle Tennessee Electric Membership Corporation in Murfreesboro, Tennessee and a constituent of Congressman Gordon.

Then Mr. Larry Fleming, who is the President and CEO of Knoxville Utilities Board in Knoxville, Tennessee.

Then Mr. Darrell Anderson, the Environment and Energy Staff from General Motors Corporation. He actually is from Detroit, Michigan but obviously he is here because there is a Saturn manufacturing and assembly plant owned by General Motors just south of Nashville. He is representing the Tennessee Valley Industrial Committee.

Last but not least, we are going to hear from Mr. Lyle D. Larson, who is the counsel for TVA Watch. He is from Birmingham, Alabama.

We are going to give each of you gentlemen 7 minutes to summarize your written testimony and then we will have some questions.

So we will start with Mr. Medford and then work our way to my right, to his left. Mr. Medford, welcome to the subcommittee.

STATEMENTS OF MARK MEDFORD, EXECUTIVE VICE PRESIDENT, CUSTOMER SERVICE, TENNESSEE VALLEY AUTHORITY; JAMES O. BAKER, PRESIDENT, MIDDLE TENNESSEE ELECTRIC MEMBERSHIP CORPORATION, REPRESENTING TENNESSEE VALLEY PUBLIC POWER ASSOCIATION; LARRY A. FLEMING, PRESIDENT AND CEO, KNOXVILLE UTILITIES BOARD; DARRELL ANDERSON, ENVIRONMENT AND ENERGY STAFF, GENERAL MOTORS, REPRESENTING TENNESSEE VALLEY INDUSTRIAL COMMITTEE; AND LYLE D. LARSON, COUNSEL, TVA WATCH

Mr. MEDFORD. Thank you, Mr. Chairman. My name is Mark Medford and it is a pleasure to welcome you to Nashville. We are grateful to the subcommittee for recognizing the importance of getting electric restructuring right for the Nation as a whole, including the residents of the Tennessee Valley. I want to especially thank you, Congressman——

Mr. BARTON. Is there a button to push for your microphone or something? It may be on, but it does not sound like it.

Mr. MEDFORD. Maybe I am not close enough. Is this better?

Mr. BARTON. Yes, sir.

Mr. MEDFORD. I want especially to thank you, Congressman Bryant, for your leadership on this issue.

When I testified before this subcommittee in May, I described how TVA is more than an electric utility. We are responsible for flood control, navigation, economic development and recreation for a seven-state area in addition to being the provider of electricity to 159 co-ops and municipal utilities and 63 directly served customers. But today, I want to focus on how different we are from other utilities in just our role as electrical supplier.

Of the three traditional utility functions—generation, transmission and distribution—TVA primarily performs transmission and generation. Unlike integrated utilities who sell most of their power to retail customers, TVA sells most of its power to wholesale distributors. In a restructured marketplace, our distributors will have their choice of suppliers and TVA will compete to retain as much of that demand as possible. We also operate an extensive network which is managed as an open-access system.

Much of the focus of the State efforts on restructuring relates to separating the retail distribution function from generation. Since TVA does not have a distribution function except for several high voltage directly served customers, structural changes for TVA are unnecessary to assure competitiveness in the Tennessee Valley. Nonetheless, some of those who would compete with us argue that TVA should not be allowed to build new generation to meet load growth or even replace worn out generation plants. Let me be blunt. Their ultimate goal is to eliminate TVA completely.

Without the ability to build new generation, TVA will be unable to meet growing demands in the Valley and unable to replace generation no longer viable due to increasing environmental regulations. TVA will become dependent on the wholesale market. We refer to the result as a death spiral because as we lose the ability to meet our customers' demands through our own resources, we become increasingly dependent upon an extremely volatile wholesale market. It is unlikely we will be able to pass through these costs on a timely basis. These restriction would, in effect, require TVA to compete with both hands tied behind its back. Opponents of TVA hide this death spiral goal under the cloud of subsidy arguments—no income taxes, debt financing and our credit rating.

Mr. Chairman, I think it is apparent that these characteristics entail no subsidy at all, but are simply an incidence of government ownership. TVA Watch acknowledges that there is nothing unique about TVA, all of their concerns except TVA's bond ratings apply equally to all other governmentally owned utilities. They freely admit that they have targeted TVA because of its size.

If Congress were to change any of those characteristics, it would create significant confusion in the financial markets where municipalities use the same financing mechanisms to finance schools, hospitals, highways, prisons and other necessities. Since it is not feasible or appropriate to change the characteristics being complained of, TVA Watch simply argues against TVA's ability to build plants to compete with them and astoundingly asserts that this death spiral is necessary to "level the playing field." The playing field would be level, all right. All public and cooperatively owned power systems would be leveled flat.

The real issue is whether there is a place for public power in a competitive electric industry, a legitimate issue for Congress to debate. But to attempt to eliminate public power in a back door, piecemeal and uncoordinated fashion, would risk the reliability of the Valley's electric supply, result in significant additional cost, especially to the residents of the Valley, waste taxpayer assets and create unnecessary confusion and upheaval in the financial markets. One size does not fit all in this industry for almost anything, including the type of participants.

This summer, power demand in the Valley exceeded last year's peak 16 times. TVA did not curtail or brown-out any firm load. We currently estimate the need for 3000 additional megawatts in our region by 2004, in large part because of the already mentioned robust growth rate in the Valley. There is no room for error, the cost of any miscalculation on power supply in Federal legislation would ultimately be felt in the Valley.

Mr. Chairman, the strength of America's vibrant economic system has always been its diversity which enriches competition. There is nothing unique or unAmerican in this diversity, it is in fact a cornerstone of our system.

Those of us who are testifying before you today may not all agree, but with a single exception, the rest of us are committed to what is good for the Tennessee Valley, and TVA is committed to working with our stakeholders to ensure that all of our customers, the large and the small, benefit from electric restructuring.

Thank you for this opportunity to address the place of public power in a competitive industry. I would be happy to respond to any questions or comments.

[The prepared statement of Mark Medford follows:]

PREPARED STATEMENT OF MARK MEDFORD, EXECUTIVE VICE PRESIDENT, CUSTOMER SERVICE AND MARKETING, TENNESSEE VALLEY AUTHORITY

INTRODUCTION

Mr. Chairman, welcome to Nashville and thank you for this opportunity to address the subcommittee at this important field hearing. We are pleased that members of TVA delegation, led by Congressman Ed Bryant, have asked you to come to the Valley today to learn more about our region and the electric power needs of its citizens.

My name is Mark Medford. I serve as TVA's Executive Vice President for Customer Service and Marketing. My responsibilities include working with the 159 distributors of TVA electric power and 63 direct-served customers within the Tennessee Valley. I also have been designated the lead TVA executive on electricity restructuring matters.

Exactly four months ago today this subcommittee held a similar hearing on the role of federal power in a competitive marketplace. As a participant in that hearing, I know there is substantial interest on this panel over the future of TVA. I hope your visit to our region will lead to an even better understanding of the unique issues that face the Valley.

Given that TVA is a federal agency, federal legislation clearly is required to bring about the kinds of changes to the electricity marketplace envisioned by states in other parts of the country. Although stakeholders in the Valley must determine whether these types of changes are appropriate here as well, only Congress and the President can provide the freedom for the region to begin this process.

However, just as Congress and the President have the authority to establish this framework for discussion in the Valley, there is also the potential for federal legislation to erect roadblocks to the continued availability of low-cost and reliable power for the people of our region, such as a requirement that TVA secure all future generation facilities through long-term contractual agreements with customers. For this reason, we applaud your decision to look to the Members of Congress from our region to assist in guiding the subcommittee through this process.

I would like to take some time to reiterate my comments from a few months ago on how the Tennessee Valley Authority currently fits into the electric power industry and how TVA can continue to serve the public interest in a competitive environment. I would like to build on my earlier testimony in order to address some emerging issues with respect to your efforts to pass a comprehensive electricity restructuring bill.

BACKGROUND ON TVA

The Tennessee Valley Authority is large and complex. TVA is a federal corporation, the nation's largest public power producer, a regional economic development

agency, and the steward of the Tennessee River basin. TVA was established by Congress in 1933, primarily to provide flood control, navigation, and electric power in the Tennessee Valley's seven state region. The TVA Act also directs its three-member Board of Directors to set the lowest feasible electric rates for the Valley. TVA is a leader within the Tennessee Valley for economic development, low-cost electricity and integrated resource management which cuts across state boundaries.

The Tennessee River is the fifth largest river system in the United States. It stretches 652 miles from Knoxville, Tennessee to Paducah, Kentucky. It encompasses 11,000 miles of shoreline, more than 50 dams and a dozen locks. About 34,000 loaded barges travel the Tennessee River each year—the equivalent of two million trucks traveling the roads. Before TVA, the Tennessee River flooded regularly, causing millions of dollars of damage whenever it left its banks. Under TVA's integrated resource management the Tennessee River is the only major river system in the United States that has not suffered widespread flooding in over 60 years.

TVA's power system has a dependable generating capacity of 28,417 megawatts. TVA's generation consists of approximately 61 percent coal, 28 percent nuclear, and 11 percent hydropower. TVA provides wholesale power to its 159 local municipal and cooperative power distributors through a network of 17,000 miles of transmission lines in the seven state region. TVA also sells power directly to 63 large industrial and federal customers. Essentially, TVA supplies the energy needs of nearly eight million people every day over a power service area covering 80,000 square miles, including Tennessee, and parts of Mississippi, Alabama, Georgia, North Carolina, Virginia, and Kentucky.

TVA's service area is now limited by law. A "fence" keeps TVA from serving customers outside its region as defined under a 1959 law. Under the 1992 Energy Policy Act, electricity companies are prohibited from "cherry-picking" customers inside the TVA region, the most attractive of which have large, concentrated loads.

A key fact that can never be emphasized enough is that the TVA power system currently is 100 percent self-financed through its power revenues and public borrowings secured solely by those revenues. It receives no taxpayer dollars to fund its operations.

TVA'S RECENT EFFORTS TO IMPROVE

Over the past five years TVA has worked very hard to improve all aspects of its operations. For example, TVA has:

- Reduced its debt by more than \$1 billion and introduced a comprehensive Ten-Year Financial Plan to ensure TVA's cost of power will be competitive in the coming decade.
- Maintained adequate power supply and transmission capacity to ensure reliable electricity delivery, even during prolonged heat waves during the summers of 1998 and 1999.
- Developed five nuclear units into an award-winning nuclear program and brought Watts Bar Nuclear Plant on-line.
- Began refurbishing of coal and hydropower units to increase capacity without incurring substantial additional capital costs.

TVA's Ten-Year Business Plan was specifically designed to ensure that TVA will be ready for the new competitive marketplace of the future. Its overriding goal is to keep TVA's total delivered cost of power at a level competitive with the forecast of the future market price of power surrounding TVA's service territory. A primary means for helping accomplish this is to reduce debt and lower interest costs. Over the course of the Ten-Year Plan, TVA originally envisioned needing to cut its debt by half. However, the amount of debt reduction ultimately necessary may differ as costs for all utilities rise, particularly in the area of environmental compliance, and as the forecasted market price of power grows higher. By adhering to this sound financial strategy, TVA will remain a competitive choice of electric power supply within the Valley.

TVA'S FUTURE ROLE

It is an understatement to say this subcommittee has spent a substantial amount of time and effort on the future of the electricity industry. I can assure you that we in the Valley have also dedicated a great deal of time and resources on this important issue. We look forward to continuing to participate in this debate as you move forward.

As you search for a bipartisan, consensus electricity industry restructuring bill among your committee members, you will be pleased to know there is already much agreement within the Valley on the future of TVA. There is overwhelming support for TVA to continue its integrated mission, managing the Tennessee River and re-

lated land resources and maintaining its role as a low-cost integrated electric supplier for the Valley.

Starting in 1997 with the Department of Energy's "Tennessee Valley Electric System Advisory Committee," regional stakeholders began examining the future of TVA in a competitive electricity industry. Every group testifying before the subcommittee today participated in that process. Since the advisory committee issued its report, TVA has worked extensively with stakeholders within the Valley to translate the key principles identified in the DOE process to a legislative proposal.

The advisory committee was created to develop, as much as possible, a consensus among regional stakeholders for a legislative proposal to define the role of TVA in a restructured competitive electric industry. In addition to TVA, the participants included: the Tennessee Valley Public Power Association representing distributors of TVA power, the Tennessee Valley Industrial Committee representing large industrial customers directly served by TVA, Associated Valley Industries representing industrial customers served by the distributors, the Southern States Energy Board, the Tennessee Valley Energy Reform Coalition representing local environmental interests, the Rural Legal Services of Tennessee representing the interests of rural consumers, the League of Women Voters Natural Resources Chair in Knox County, the International Brotherhood of Electrical Workers, and the International Brotherhood of Teamsters. National energy stakeholders like ENRON, TVA Watch, and the Electric Clearinghouse also participated.

In March 1998, the advisory committee submitted its final report. Relying on the report and working with TVA and other stakeholders, the Administration crafted a "TVA title" for inclusion in the its Comprehensive Electricity Competition legislation, released on April 15 of this year. The title in the Administration bill is the product of hard work and compromise through a formal regional process and creates an appropriate role for TVA in a restructured environment. TVA supports this title in the Administration's bill and greatly appreciates DOE's impressive effort that was undertaken to integrate the interests of a wide variety of stakeholders.

I would like to officially submit a copy of the Administration bill's TVA title to the record for consideration by the subcommittee. I also would like to take a few moments to highlight the key components of this plan to help TVA and the region make the transition to more competitive markets.

1. Equitable Competition

- TVA transmission rates, terms and conditions would be subject to regulation by the Federal Energy Regulatory Commission.
- Restrictions to fair competition, such as the TVA "Fence" and "Anti-Cherry Picking" amendment would be removed simultaneously on the effective date of federal legislation.

2. TVA Power Sales

- TVA sales of electricity outside of the existing service area would be limited in two ways. First, TVA could only make wholesale sales—no retail sales, and second, these sales would be limited to electricity that is surplus to the demand of its customers in the TVA service area.
- TVA would be permitted to sell to new retail customers inside the TVA service area but only in circumstances controlled by local power distributor decisions.

3. Stranded Investment Recovery

- Within one year of enactment, FERC would promulgate regulations to establish guidelines for TVA's recovery of stranded costs. TVA would submit a stranded cost recovery plan to FERC for approval consistent with established guidelines.
- TVA would not collect stranded investment after September 30, 2007.
- TVA would use any funds recovered to repay debt consistent with TVA's Ten-Year Plan objectives.

4. Antitrust Coverage

- TVA would be subject to the injunctive relief and criminal penalties—but not the civil damage provisions—of the antitrust laws of the United States. This standard is comparable to the antitrust standards generally applied to municipal governmental entities.

5. Renegotiation of Wholesale Power Contracts

- TVA and the distributors would renegotiate certain key provisions of their existing power contracts within one year of enactment of comprehensive energy legislation.
- If TVA and a distributor cannot reach agreement on new contract terms, the dispute would be settled by FERC.

We are pleased that this proposal, above all, affirms TVA's continued role within the Valley to manage the river system and provide electricity for Valley residents. However, we also take note of the new responsibilities and limitations that TVA would have to deal with in the emerging marketplace, such as:

- For the first time, TVA would be subject to antitrust prohibitions.
- For the first time, TVA transmission rates would be subject to FERC jurisdiction.
- For the first time, TVA would be required—unlike any other utility in the country—to renegotiate certain key provisions in all existing full-requirement contracts with distributors within one year of enactment, with FERC being given the authority to make decisions if agreement could not be reached.

Almost at the same time the Administration was drafting its bill, some members of Congress from the TVA region urged TVA to sit down with its distributors and work directly with the Tennessee Valley Public Power Association, which represents TVA's 159 distributors, in order to develop a regional solution for inclusion in the restructuring legislation before Congress. I was pleasantly surprised at the number of areas we agreed upon. Of course, there are some outstanding differences, just as one would expect when a seller and a customer sit down to discuss their relationship in an emerging marketplace. In fact, the diversity of the TVA customer base has resulted in some differences even among our customers. Nevertheless, we are committed to continuing our discussions with TVPPA and all stakeholders in the Valley.

As I mentioned at the beginning of my testimony, congressional action is essential to allow the Tennessee Valley region the full opportunity to choose to move toward a more competitive electric power marketplace. We are committed to working with all of the members of this subcommittee to assure that TVA has an appropriate role in a future restructured electric power industry.

There are proposals being actively considered, however, that risk compromising the low-cost, reliable electricity available in the Valley.

Perhaps the greatest threat are those proposals that would hinder TVA's ability to compete for the growing demand for electricity in the Valley. For instance, some proposals have included a requirement that TVA secure all future generation facilities—for the life of those facilities—through contractual arrangements with customers. In practice, that means TVA would be forced to find customers willing to sign long-term (20 to 30 years) contracts tied to specific power plants—not a likely prospect in a competitive marketplace. Effectively, this would prevent TVA from ever pursuing new generation resources to meet the anticipated demand in the Valley.

The TVA service territory is experiencing about four-percent demand growth for electricity per year. This trend is projected to continue well into the foreseeable future. While the most attractive loads may be able to find someone to provide new generation without the shackles of a 30-year contract, we worry whether the smaller and rural customers will have the same opportunities. We do not think their future access to cost competitive power from TVA should be contingent on such a restrictive contractual obligation.

TVA, in large part, was created because other utilities found many customers in our region unattractive and not profitable enough to serve. It is our historic mission to provide for the current and future electricity needs of all people in the Tennessee Valley. It is critical to our customers that TVA continue to compete to meet their growing electric power needs.

You don't need to look much further than this summer to see how important this capability is to people in the Valley. Throughout our history, TVA has *never* had the type of outages that other regions of the country have experienced in recent years. Just a few weeks ago when electric power systems that neighbor TVA and systems across the Eastern interconnection were experiencing substantial problems associated with record demand, TVA provided the electricity necessary to keep businesses running, as well as homeowners' lights and air conditioners on in the Valley.

I can tell you, though, it was not an easy job. During a 10-day period in July, TVA surpassed our previous all-time peak demand on eight of those days, including a Saturday. Clearly, we are at the margins in the Valley and need to maintain the flexibility to respond to this growing Valley demand in the future.

Another threat to the low-cost, reliable power currently available in the Valley are attempts to make TVA look and behave exactly like an investor-owned utility. Mr. Chairman, I for one think the greatest strength in our electricity industry, particularly as we move to a new marketplace, is its diversity. We have a very broad spectrum of providers, from rural electric cooperatives to the biggest private companies, and from municipal systems to regional federal power providers. I believe this variety should be embraced and nurtured, not discarded as we move forward. Public power and investor-owned utilities make different, but very important contributions

to the strength of our Nation's electric power supply networks. The continued, viable presence of both in a future restructured marketplace will help ensure a reliable power supply for all on an affordable basis.

Unfortunately, some have chosen to make curious representations about the inherent differences between public and private power as subsidies to public power. Now, they usually talk about the benefits of being a public power utility as a "subsidy" and the benefits of being investor-owned as "reasonable". Well, that is understandable. They are just trying to position themselves in the best possible way as Congress makes decisions about the electricity markets of the future. But, as you rightly craft your legislation to create a fair marketplace, be wary of the claims of those who want to "level the playing field" with a noticeable tilt in their direction.

Perhaps the most outlandish claims are about state and federal tax burdens. Once you add together the taxes and tax equivalent payments made by Valley distributors and those paid by TVA, which is necessary to compare TVA with investor-owned utilities on an "apples to apples" basis, it is clear that comparable amounts are paid at the state and local level in the southeastern region of the country. As we all know, TVA doesn't pay federal income tax. That is hardly a secret and is certainly not a scandal. We are a federally-owned corporation with a mission to serve the public interest on a non-profit basis, not to generate profits to increase stockholder wealth.

Nevertheless, I have heard some say that, because TVA has substantial gross revenues and some investor-owned utilities have substantial gross revenues, there is some comparison to be made in how much tax we pay. Well, any first-year accounting student can tell you that the federal government doesn't tax on revenue, it taxes on profit and income. When you think of it in those terms, while investor-owned utilities typically owe about one-third of their net earnings to the U.S. Government as taxes, the U.S. Government receives 100 percent of TVA's net earnings by virtue of its ownership of TVA. And, investor-owned utilities aren't always required to immediately pay what they owe in taxes because of their ability to defer payment. Over the years, IOUs have amassed more than \$100 billion of zero interest, subsidized loans from the Internal Revenue Service through such deferrals. TVA, on the other hand, has made a continuous stream of payments to the U.S. treasury over 40 years totaling about \$3 billion.

CONCLUSION

As I testified four months ago, TVA is working hard to prepare for a restructured future competition by reducing our debt, keeping our electric rates low, and efficiently managing the Tennessee Valley's integrated resource system. We have made progress in this regard, even since we last appeared before this subcommittee.

TVA remains committed to work with this subcommittee and TVA stakeholders to determine the nature of the future role that TVA will play in this changing industry. Let me re-emphasize how much we in the Valley applaud your decision to look to the Valley's congressional delegation to assist you in your efforts.

Thank you for the opportunity to testify before this important hearing.

Mr. BARTON. Thank you, Mr. Medford.

I think all the panelists are committed to a better America, I do not think anybody here is committed to a worse America.

We would like to hear from Mr. Jim Baker now, who is the President of the Middle Tennessee Electric Membership Corporation, and I believe you have testified in Washington.

Mr. BAKER. Yes, sir, I did sometime ago.

Mr. BARTON. Yes, sir. We would like to hear your statement. It is in the record in its entirety and we recognize you for 7 minutes.

STATEMENT OF JAMES O. BAKER

Mr. BAKER. Mr. Chairman, Representative Bryant, members of the subcommittee, my name is James O. Baker and if the chairman thinks that he had name confusion problems, he ought to be following me around about 10 years ago.

I had the opportunity to meet the President also and our parting comments after a certain amount of chit-chat was that I hope you and Tammy Faye's problems will be better.

So I am not sure about his, but mine have probably gotten more complicated.

I am President of Middle Tennessee Electric Membership Corporation, that is an electric cooperative headquartered in Murfreesboro, Tennessee.

Middle Tennessee currently purchases all of its wholesale power from the Tennessee Valley Authority and provides retail electric service to more than 300,000 individuals in four counties. It is one of TVA's largest wholesale customers and one of the largest rural electric cooperatives in the United States on the basis of number of members served.

But I am testifying today on behalf of the Tennessee Valley Public Power Association, TVPPA is the regional service organization of 160 not-for-profit consumer-owned electric utilities in the Tennessee Valley and they include all the municipal and cooperatively owned systems that distribute power that is generated by TVA to 8.5 million customers over a seven-State region. In the language of the TVA Act, these municipal and cooperative utilities are called distributors.

TVPPA appreciates Chairman Barton's decision to hold a hearing today on the TVA in a restructured or competitive electric industry here in the Tennessee Valley where those that will be most directly affected by any changes to TVA can participate and we can contribute to the debate. We also want to thank Representative Ed Bryant and the other members of the subcommittee from the Valley for requesting this hearing, and for their leadership in developing a TVA title for Federal legislation.

We recognize that drafting a TVA title that both protects the interests of the consumers in the Valley and makes TVA a more competitive—makes TVA more competitive is no easy task. However, we strongly believe that if changes are to be made by TVA, they should be driven by our Congressional delegation working closely with the distributors and the consumers that we serve. The seven States that receive TVA power are among the 23 States where retail electric rates are below the national average. For that reason, TVPPA has approached the matter of Federal utility restructuring legislation with extreme caution. We have opposed a Federal mandate for retail competition or customer choice because we are not convinced that it will result in lower cost or other benefits to our consumers. We believe that any restructuring legislation must put the interests of the electric consumers first.

Overall TVA has been very good for the Valley. For more than 60 years, TVA has provided reliable, reasonably priced power for consumers and has promoted the economic development of this region. We believe TVA's mission with regard to delivery of power should continue to meet the power needs inside the Valley and that it should be able to develop the needed resources without unnecessary or arbitrary restrictions. At the same time though, we recognize the utility industry is moving toward greater competition and that all utilities must adopt to a changing environment. We know that TVA and the distributors cannot fence ourselves off from those changes in the rest of the electric utility industry. We know that Congress has the authority to require changes in TVA and the way

it operates and we know that if we in the Valley do not take a lead to restructure TVA, others will be happy to do that for us.

Finally, if the Federal restructuring legislation goes forward, we believe that the elimination of the statutory fence and the anti-cherry-picking amendment provisions in the current law that prevent two-way wholesale competition could result in benefits to our consumers. Acting through the Government Relations Policy Committee and the Board of Directors, TVPPA has devoted a significant amount of time and energy over the last 3 years to develop a comprehensive position paper regarding the role of TVA in electric restructuring. That document was turned into a draft TVA title and submitted with my testimony before this subcommittee on May 13, 1999, and could be incorporated into a Federal restructuring bill.

In this ongoing policy development process, TVPPA has worked with TVA and with all distributors to try to reach a consensus on a single draft title. While we continue to have some areas of disagreement on policy and wording, we are in substantial agreement that changes are needed in the contractual relationship between TVA and the distributors and in the wholesale electric market in this region. Specifically, we agree with provisions that:

First, take down the fence that allows TVA to sell excess power at wholesale outside the region. Concurrently, the anti-cherry-picking provision of the Energy Policy Act of 1992 should be repealed to allow outside suppliers to sell at wholesale inside the Valley.

Second, we believe that we need to allow current restrictive long-term wholesale contracts between TVA and the distributors to be shortened and modified to give the distributors the right to purchase all or portions of their wholesale power and energy from other suppliers subject to rates, terms and conditions relating to the use of TVA's transmission system to the regulation by FERC to ensure open non-discriminatory access to distributors and others. Also to allow FERC to determine TVA's stranded costs resulting from shortened or canceled contracts prior to October 2007, if any, the same standards and rules that apply to other utilities.

We would eliminate TVA's retail ratesetting authority over distributors and allow those other non-profit and municipal utilities to be self-regulating, as they are in the rest of the country.

We would also apply Federal antitrust laws to TVA power program as they are applied to other governmental entities.

In addition, TVA thinks that we should allow the distributors to challenge TVA's wholesale rates through an alternative dispute resolution mechanism such as arbitration or mediation. We would limit TVA's sales outside the Valley to wholesale, we would limit TVA's sales inside the Valley to retail sales inside the Valley to existing retail customers.

Before closing, let me say just a minute about TVA's position on the review of TVA's wholesale rate. As the committee is well aware, wholesale rates of TVA are in no way regulated by any court or regulatory forum. As we move to a more competitive market, we think there must be a third party review of TVA's wholesale rates. This has been a considerable debate to us as to how that should be done. Ultimately, we have decided that the most appropriate process would be to require TVA and the distributors that

are unhappy with the proposed rate to participate in an alternative dispute resolution process. We urge the committee to look at this.

We look forward to working with the committee on future hearings and we will be happy to answer any questions at the appropriate time.

[The prepared statement of James O. Baker follows:]

PREPARED STATEMENT OF JAMES O. BAKER ON BEHALF OF TENNESSEE VALLEY
PUBLIC POWER ASSOCIATION

Chairman Barton, Rep. Bryant and members of the subcommittee, my name is James O. Baker and I am the President of the Middle Tennessee Electric Membership Corporation, a rural electric cooperative headquartered in Murfreesboro, TN. Middle Tennessee currently purchases all its wholesale power from the Tennessee Valley Authority (TVA) and provides retail electric service to more than 300,000 consumers in four counties. It is one of TVA's largest wholesale customers and one of the largest rural electric cooperatives in the United States, on the basis of the number of consumers served.

I am testifying today on behalf of the Tennessee Valley Public Power Association. TVPPA is the regional service organization of the 160 not-for-profit, consumer-owned electric utilities in the Tennessee Valley, including all the municipally- and cooperatively-owned systems that distribute power generated by TVA to 8.5 million consumers in a seven-state region. In the language of the TVA Act, these municipal and cooperative utilities are called "distributors."

TVPPA appreciates Chairman Barton's decision to hold today's hearing on the role of TVA in a restructured or competitive electric industry here in the Tennessee Valley, where those who will be most directly affected by any changes to TVA can participate and contribute to the debate. We also want to thank Rep. Ed Bryant and the other members of the subcommittee from the Valley for requesting the hearing and for their leadership in developing a TVA title for federal legislation.

We recognize that drafting a TVA title that both protects the interests of consumers in the Valley and makes TVA more competitive is no easy task. However, we strongly believe that if changes are to be made to TVA, they should be driven by our congressional delegation, working closely with the distributors and with the consumers we serve.

The seven states that receive TVA power are among the 23 states whose retail electric rates are below the national average. For that reason, TVPPA has approached the matter of federal utility restructuring legislation with caution. We have opposed a federal mandate for retail competition or "customer choice" because we are not convinced it will result in lower costs or other benefits for our consumers. We believe that any restructuring legislation must put the interests of electric consumers first.

Overall, TVA has been very good for the Valley. For more than 60 years, TVA has provided reliable, reasonably priced power for consumers and has promoted the economic development of the region. We believe TVA's mission with regard to delivery of power should continue to be to meet the power needs inside the Valley and that it should be able to develop needed resources without unnecessary or arbitrary restrictions.

At the same time, we recognize that the utility industry is moving towards greater competition and that all utilities must adapt to the changing environment. We know that TVA and the distributors cannot "fence ourselves off" from those changes and from the rest of the electric industry. We also know that Congress has the authority to require changes in TVA and the way it operates and that if we in the Valley do not take the lead to restructure TVA, others will be happy to do the job for us.

Finally, if federal restructuring legislation goes forward, we believe that eliminating the statutory "fence" and the "anti-cherry picking" provisions in current law that prevent two-way wholesale competition in the Valley could result in benefits to our consumers.

Acting through its Government Relations Policy Committee and Board of Directors, TVPPA has devoted a significant amount of time and energy over the last three years to develop a comprehensive position paper relating to the role of TVA in electricity restructuring. That document was turned into a draft "TVA title" and submitted with my testimony before this subcommittee on May 13, 1999 and could be incorporated into a federal restructuring bill.

In this on-going policy development process, TVPPA has worked with TVA and with all distributors to try to reach consensus on a single draft title. While we con-

tinue to have some areas of disagreement on policy and wording, we are in substantial agreement that changes are needed in the contractual relationship between TVA and the distributors and in the wholesale electric market in the region.

Specifically, we agree with provisions that:

- Take down the “fence” to allow TVA to sell excess power at wholesale outside the region. Concurrently, the “anti-cherry picking” provisions of the Energy Policy Act of 1992 should be repealed to allow outside suppliers to sell power at wholesale inside the Valley;
- Allow current restrictive, long-term wholesale contracts between TVA and the distributors to be shortened and modified to give distributors the right to purchase all or portions of their wholesale power and energy from other suppliers;
- Subject the rates, terms and conditions relating to use of TVA’s transmission system to regulation by FERC to ensure open, non-discriminatory access by distributors and others;
- Allow FERC to determine TVA’s stranded costs resulting from shortened or canceled contracts prior to October 1, 2007, if any, using the same standards and rules that apply to other utilities but ensuring that costs are not shifted among customer groups; and
- Eliminate TVA’s retail ratesetting authority over distributors and allow those not-for-profit municipal and cooperative utilities to be self-regulating, as they are in most states;
- Apply federal anti-trust laws to the TVA power program as they are applied to local governmental entities without the financial penalties that would burden our consumers.

In addition, TVPPA believes the following provisions are also in the best interest of our member distributors and the consumers we serve:

- Allow distributors to challenge TVA’s wholesale rates through an alternative dispute resolution mechanism, such as arbitration or mediation;
- Limit TVA sales outside the Valley to wholesale transactions; and
- Limit TVA retail sales inside the Valley to existing customers. Any new retail sales would be allowed only under restrictions agreed upon with distributors and if those sales would not bypass local distribution facilities.

Before closing, let me explain in a little more detail TVPPA’s position on review of TVA’s wholesale rates. As the committee is aware, under current law there is no review of TVA’s wholesale rates in any court or regulatory forum. As we move into a more competitive wholesale and retail electric market, the distributors believe it is necessary to have some form of third party appeal to challenge rates we may find unreasonable.

Over the course of our internal policy debate, we examined and rejected a number of different approaches. Ultimately, we decided that the most appropriate process would be to require TVA and the distributor or distributors that are unhappy with a proposed rate to participate in an alternative dispute resolution process to resolve the dispute. We urge the Committee’s favorable consideration of this approach.

We look forward to working with Rep. Bryant and other Members of the Committee to forge a TVA title that is fair to the region’s consumers and that permits TVA to be a competitive supplier for the Valley.

TVPPA appreciates the opportunity to appear before the subcommittee today to present these views and I would be happy to answer any questions you may have.

Mr. BARTON. Thank you, Mr. Baker.

We would next like to hear from Mr. Larry Fleming, who is the President of Knoxville Utilities Board. Your statement is in the record in its entirety and we welcome you to summarize it in 7 minutes.

STATEMENT OF LARRY A. FLEMING

Mr. FLEMING. Mr. Chairman, my name is Larry Fleming and I am President and CEO of the Knoxville Utilities Board. I am here today on behalf of KUB and the Memphis Light, Gas and Water Division. Thank you for the invitation to present our views on the topic of electricity competition and the role of the Tennessee Valley Authority.

As you know, Herman Morris, President and CEO of Memphis Light, Gas and Water, testified before this subcommittee in May to

present our positions on TVA restructuring. I will not repeat the substance of Herman's testimony here, but will focus instead on the three issues of greatest importance to KUB and MLGW. I also have some updated material to submit for the record.

Before I highlight the specific actions KUB and MLGW urge this Congress to take, I would like to emphasize what may be the most important point of all. It is essential that this Congress do something on TVA. I know nationwide electric restructuring is a daunting task and there are those that say retail competition is already taking hold through actions taken by the States and will gradually spread across the country even if Congress does nothing. There are those who see addressing TVA as a daunting task, as indeed it is, and favor doing nothing on it either. But there is a huge difference between taking a wait and see approach for the rest of the country and taking it for TVA.

Nobody but Congress has the power to introduce competition to the Tennessee Valley. The States cannot do it, the marketplace cannot do it because Federal law prohibits it. It simply will not come unless Congress acts affirmatively to make it possible. And whereas the rest of the country already enjoys wholesale competition for electric power, the question is whether to mandate retail competition. The Tennessee Valley does not yet have access even to wholesale competition. We need this Congress to act now simply to allow the Valley to catch up with the benefits the rest of the country have enjoyed since 1992—access to wholesale competition for electric power.

Now the specific actions that we urge Congress to take can be summarized as follows:

1. Remove the statutory barriers to wholesale electric competition in the Tennessee Valley.
2. Shorten the 10-year notice period in our power supply contracts with TVA.
3. Subject TVA to the jurisdiction of the Federal Energy Regulatory Commission.

We believe these measures are necessary to ensure full and fair transition to competition in the Tennessee Valley. First, the statutes that prevent Tennessee Valley residents from enjoying the many benefits of competitive electric markets must be repealed. It has now been 7 years since the passage of the Energy Policy Act. Wholesale electric competition is already a reality throughout most of the United States and nearly half the States have already taken steps to implement electric competition at the retail level. But America's largest power generator, TVA, is still a federally sanctioned monopoly. The Tennessee Valley has been walled off from the rest of the country which continues to move forward with electric restructuring while the Tennessee Valley is left behind.

We urge Congress to take action to tear down these walls. There can be no retail competition in Tennessee unless or until there is wholesale competition in Tennessee.

Neither the States nor FERC have the power to mandate wholesale competition in the Valley and TVA is not about to start transmitting power of other suppliers voluntarily. Why would TVA willingly subject itself to competition for customers inside the fence when it is prohibited from competing for customers outside the

fence? To leave these barriers in place would be unfair to Tennessee Valley residents and could be disastrous for the economic welfare of the Tennessee Valley region. When new enterprises are choosing a location, will they choose an area of the country where they will have access to competitive power supply options or will they choose the Tennessee Valley where there are no such options? The Tennessee Valley has been left behind once before, we do not want to see that happen again.

But the mere repeal of these statutes without more will not fully open up the Valley to competition. There are other barriers to implementation of wholesale electric competition in this region. Our current contracts with TVA, for example, renew automatically each year and require 10 years notice of termination. This means that unless Congress takes action to modify those contracts, KUB and MLGW will still be captive TVA customers when the children born on the day the Energy Policy Act was signed into law graduate from high school.

We have tried without success to renegotiate these agreements, but due to the extended notice period, TVA has no incentive to make any meaningful concessions. We need negotiating leverage and only a shortened notice of termination provision will give us the leverage we need. For this reason, we strongly urge Congress to shorten the 10-year notice of termination provisions contained in our power supply contracts with TVA.

Finally, if TVA is going to become a market participant, fairness requires that it be subject to the same rules and regulations that apply to public utilities. Thus, Federal electric restructuring legislation removing the TVA fence should provide that FERC have jurisdiction over TVA's transmission system, stranded costs and wholesale power rates.

First, FERC jurisdiction over TVA transmission is essential to the development of a fully competitive power market. TVA owns nearly 100 percent of the transmission lines in its 80,000 square mile service area. Federal legislation opening the Tennessee Valley to competition must give FERC the authority to mandate open access to those transmission lines and to assure that TVA complies with the rules and regulations applicable to all other interstate transmission owners and operators. Like public utilities, TVA should be required to offer open access to its transmission grid for the benefit of customers inside the Valley and to otherwise comply with FERC's Order 888.

Second, FERC must be given jurisdiction to determine TVA's stranded costs. KUB and MLGW are willing to pay our fair share of TVA's stranded costs, but we believe what is fair should be determined through application of FERC's already established stranded cost rules. KUB and MLGW see no reason why Order Number 888's stranded cost provisions should not apply to TVA. Therefore, we support legislation that would give FERC jurisdiction to determine TVA's stranded costs in accordance with the rules and procedures established by FERC in Order 888.

Finally, TVA's wholesale power sales must be subject to FERC jurisdiction under Sections 205 and 206 of the Federal Power Act. Section 205 requires that all rates be on file with the FERC and that utilities may only charge rates that are just and reasonable.

There is no sound public policy justification for exempting TVA from these provisions of the Federal Power Act. FERC jurisdiction over TVA's transmission system and stranded costs will not prevent abuses of TVA's unquestionable market power unless FERC also has the power to review TVA's wholesale power rates. We strongly urge Congress to avoid this regulatory gap and to provide that TVA's wholesale power sales are subject to the same FERC jurisdiction that applies to public utilities.

In sum, we are only seeking what most of the rest of the country already has, the option to diversify our supply portfolios and more flexible power contracts. We want to obtain those benefits of competitive power markets so that we may pass them along to all of our customers—industrial, commercial and residential—for the good, long-term economic health of the Tennessee Valley region.

We appreciate the opportunity to be heard on these issues and hope that Congress will continue to take our views into account as it moves forward with the restructuring of the electric industry.

[The prepared statement of Larry A. Fleming follows:]

PREPARED STATEMENT OF LARRY A. FLEMING, ON BEHALF OF THE KNOXVILLE UTILITIES BOARD AND MEMPHIS LIGHT, GAS AND WATER DIVISION

My name is Larry Fleming and I am President and CEO of the Knoxville Utilities Board ("KLTB"). I am here today on behalf of KUB and the Memphis Light, Gas and Water Division ("MLGW"). Thank you for the invitation to present our views on the topic of "Electricity Competition: The Role of the Tennessee Valley Authority."

As you know, Herman Morris, President and CEO of MLGW, testified before this Subcommittee in May to present our positions on TVA restructuring. I will not repeat the substance of Herman's testimony here, but will focus instead on the three issues of greatest importance to KUB and MLGW. I also have some updated materials to submit for the record.

Before I highlight the specific actions KUB and MLGW urge this Congress to take, I'd like to emphasize what may be the most important point of all: it is essential that this Congress do something on TVA. I know nationwide electric restructuring is a daunting task, and there are those who say retail competition is already taking hold, through actions taken by the States, and will gradually spread across the country even if this Congress does nothing. There are also those who see addressing TVA as a daunting task—as indeed it is—and favor doing nothing on it either. But there is a huge difference between taking this wait-and-see approach for the rest of the country and taking it for TVA. Nobody but Congress has the power to introduce competition to the Tennessee Valley; the States cannot do it, and the marketplace cannot do it because federal law prohibits it. It simply will not come unless Congress acts affirmatively to make it possible. And, whereas the rest of the country already enjoys wholesale competition for electric power, and the question is whether to mandate retail competition, the Tennessee Valley does not yet have access to even wholesale competition. We need this Congress to act now simply to allow the Valley to catch up with the benefits the rest of the country has enjoyed since 1992—access to wholesale competition for electric power.

Now the specific actions we urge Congress to take can be summarized as follows:

- (1) Remove the statutory barriers to wholesale electric competition in the Tennessee Valley;
- (2) Shorten the ten-year notice period in our power supply contracts with TVA; and
- (3) Subject TVA to the jurisdiction of the Federal Energy Regulatory Commission (FERC).

We believe these measures are necessary to ensure a full and fair transition to competition in the Tennessee Valley.

First, the statutes that prevent Tennessee Valley residents from enjoying the many benefits of competitive electric markets must be repealed. It has now been seven years since the passage of the Energy Policy Act. Wholesale electric competition is already a reality throughout most of the United States and nearly half the states have already taken steps to implement electric competition at the retail level. But America's largest power generator—TVA—is still a federally sanctioned-monop-

oly. The Tennessee Valley has been walled off from the rest of the country, which continues to move forward with electric restructuring while the Tennessee Valley is left behind. We urge Congress to take action to tear down these walls. There can be no *retail* competition in Tennessee unless or until there is *wholesale* competition in Tennessee. Neither the States nor FERC have the power to mandate wholesale competition in the Valley, and TVA is not about to start transmitting the power of other suppliers voluntarily. Why would TVA willingly subject itself to competition for customers *inside* the Fence when it is prohibited from competing for customers *outside* the Fence?

To leave these barriers in place would be unfair to Tennessee Valley residents and could be disastrous for the economic welfare of the Tennessee Valley region. When new enterprises are choosing a location, will they choose an area of the country where they will have access to competitive power supply options, or will they choose the Tennessee Valley, where there are no such options? The Tennessee Valley has been left behind once before. We do not want to see that happen again.

But mere repeal of these statutes, without more, will not fully open the Valley to competition. There are other barriers to the implementation of wholesale electric competition in this region. Our current contracts with TVA, for example, renew automatically each year and require *ten years'* notice of termination. This means that unless Congress takes action to modify those contracts, KUB and MLGW will still be captive TVA customers when the children born on the day the Energy Policy Act was signed into law graduate from high school. We have tried without success to renegotiate these agreements, but due to the extended notice period, TVA has no incentive to make any meaningful concessions. We need negotiating leverage, and only a shortened notice of termination provision will give us the leverage we need. For this reason, we strongly urge Congress to shorten the ten-year notice of termination provisions contained in our power supply contracts with TVA.

Finally, if TVA is going to become a market participant, fairness requires that it be subject to the same rules and regulations that apply to public utilities. Thus, federal electric restructuring legislation removing the TVA Fence should provide that FERC shall have jurisdiction over TVA's transmission system, stranded costs, and wholesale power rates.

First, FERC jurisdiction over TVA transmission is essential to the development of a fully competitive power market. TVA owns nearly 100% of the transmission lines in its 80,000 square-mile service area. Federal legislation opening the Tennessee Valley to competition must give FERC the authority to mandate open access to those transmission lines and to assure that TVA complies with the rules and regulations applicable to all other interstate transmission owners and operators. Like public utilities, TVA should be required to offer open access to its transmission grid for the benefit of customers inside the Valley and to otherwise comply with FERC's Order No. 888.

Second, FERC must be given jurisdiction to determine TVA's stranded costs. KUB and MLGW are willing to pay our fair share of TVAs stranded costs, but we believe that what is "fair" should be determined through application of FERC's already-established stranded cost rules. KUB and MLGW see no reason why Order No. 888's stranded cost provisions should not apply to TVA. Therefore, we support legislation that would give FERC jurisdiction to determine TVAs stranded costs in accordance with the rules and procedures established by FERC in Order No. 888.

Finally, TVAs wholesale power sales must be subject to FERC jurisdiction under sections 205 and 206 of the Federal Power Act (FPA). Section 205 requires that all rates be on file with FERC and that utilities may only charge rates that are just and reasonable. There is no sound public policy justification for exempting TVA from these provisions of the FPA. FERC jurisdiction over TVA's transmission system and stranded costs will not prevent abuses of TVAs unquestionable market power unless FERC also has the power to review TVAs wholesale power rates. We strongly urge Congress to avoid this regulatory gap and to provide that TVA's wholesale power sales are subject to the same FERC jurisdiction that applies to public utilities.

In sum, we are only seeking what most of the rest of the country already has: the option to diversify our supply portfolios and more flexible power contracts. We want to obtain those benefits of competitive power markets so that we may pass them along to *all our* customers—industrial, commercial and residential—for the good of the long-term economic health of the Tennessee Valley region.

We appreciate the opportunity to be heard on these issues and hope that Congress will continue to take our views into account as it moves forward with restructuring the electric industry.

Mr. BARTON. Thank you, Mr. Fleming.

We now want to hear from Mr. Anderson. And I thought it was interesting last night we had a dinner for some of our panelists and some of the Congressmen and their staff, and Mr. Anderson, who works for General Motors, said when he arrived at the Nashville airport, even though he worked for General Motors, he could not get a rental car because there were none to be had. I thought that was kind of interesting, but he said within 15 minutes they found him one.

So Mr. Anderson, you are here testifying on behalf of the Tennessee Valley Industrial Committee. Your entire statement is in the record and we would ask you to summarize it in 7 minutes.

STATEMENT OF DARRELL ANDERSON

Mr. ANDERSON. Thank you, Mr. Chairman. My name is Darrell Anderson and I am here today in something of a dual role. My primary job is on the worldwide facilities utilities service group for General Motors in Detroit, Michigan, and in that capacity, I am involved in the purchase of electricity for GM facilities in various locations throughout the United States. I am also here today as a representative of a group called the Tennessee Valley Industrial Committee, or TVIC. TVIC is a not-for-profit corporation that is composed of industries that purchase their electricity directly from TVA, as opposed to going through a local power distributor like NES here in Nashville. There are currently 35 member companies in TVIC and these companies have just over 50 plant and other facility locations in the TVA service area ranging from western Kentucky to Mississippi to Alabama to Tennessee. From my GM perspective, I supervise the purchase of electricity for the Saturn plant in Spring Hill, Tennessee, the Corvette manufacturing plant in Bowling Green, Kentucky and for Delphi Saginaw Steering Gear Systems in Athens, Alabama that manufactures steering gear assemblies and other products.

From the broader perspective, the direct-served customers of TVA account for the purchase of about 12 percent of the electricity generated by TVA on an annual basis. That amounts to something in the range of \$600 million per year in electric bills. TVIC members tend to be very large, basic industries in such businesses as chemicals, paper and forest products and primary metals such as steel and aluminum. All of us are in highly competitive industries and we are in favor of electricity being sold in this country on the same basis with competition among the suppliers to serve the user needs for electricity and fairness in those aspects of the business that will need regulation.

My testimony today represents General Motors' position and it is also in line with discussions of the TVIC membership on this issue. TVIC is in the process of finalizing its position paper on how TVA should fit into electricity restructuring legislation, and we will provide that document to the subcommittee as soon as it is completed. A one page summary of this testimony has been provided as was requested.

Let me begin with some general comments on the issue.

We believe that TVA should be included in any national legislation that leads to the deregulation of the generation segment of the electric industry. Because of their large service territory and gen-

eration capacity, TVA is too important as a supplier of generation to be left out of the competitive markets. It is also in the best interest of the Nation and the Tennessee Valley region for TVA to continue as an ongoing and viable utility governed by a board appointed by the President and approved by the Senate. Under deregulation, customers who are now directly connected to the TVA distribution/transmission system should retain the right to that direct connection and not be forced to take service from a distributor.

Let me address timing. If the fence goes down and TVA is allowed to sell power beyond its current geographic region as defined by the TVA Act, industry served by TVA should be allowed customer choice of generation supply as soon as the fence is removed.

In the area of generation, a separate regulatory structure need not be created for the operation of TVA's generation facilities. The marketplace will suffice. TVA's stranded investment is the result of debt incurred from its nuclear construction program. The 10-year reduction program adequately provides for TVA's requirements for recovery of stranded investment and no other stranded investment should be allowed.

Customers can currently use options such as cogeneration and self-generation to minimize their electricity costs. All options currently available should continue to be available under deregulation and not be subject to any transition or stranded investment charges.

As for transmission, TVA should be required to comply with all FERC transmission rules and regulations. Specifically, TVA transmission rates and conditions of service for industries served by TVA should be non-discriminatory and be no more restrictive in terms of access, rates or conditions of service than their charges to any other transmission customer.

Another important goal of deregulation is to create large regional transmission organizations to create a more efficient transmission system and prevent pancaking of rates—in other words, prevent separate charges from each transmission organization as power is displaced through multiple grid systems. TVA should be a part of one of these large regional transmission organizations.

Finally, in the area of distribution, unless distributors opt into customer choice, tariffs, rates and conditions of service for organizations that distribute electricity from the TVA transmission system to the end user should be subject to regulation by the State utility regulatory commission. Individual States and/or distributors should not be allowed to delay customer choice for industrial customers.

Thank you, Mr. Chairman, for the opportunity to share these views with the subcommittee this morning. As you move forward in the legislative process, we will be glad to provide whatever assistance you feel is appropriate. I will be happy to try to respond to any questions you may have.

[The prepared statement of Darrell Anderson follows:]

PREPARED STATEMENT OF DARRELL ANDERSON

Thank you, Mr. Chairman. My name is Darrell Anderson, and I am here today in something of a dual role. My primary job is on the World Wide Facilities Utilities Services Group for General Motors in Detroit, Michigan—and in that capacity I am involved in the purchase of electricity for GM facilities in various locations through-

out the United States. I am also here today as a representative of a group called the Tennessee Valley Industrial Committee, or TVIC. TVIC is a not-for-profit corporation that is composed of industries that purchase their electricity directly from TVA, as opposed to going through a local power distributor like NES here in Nashville. There are currently 35 member companies in TVIC, and these companies have just over 50 plant and other facility locations in the TVA service area, ranging from western Kentucky to Mississippi to Alabama to Tennessee. From my GM perspective, I supervise the purchase of electricity for the Saturn plant in Spring Hill, Tennessee, the Corvette manufacturing plant in Bowling Green, Kentucky, and for Delphi Saginaw Steering Gear Systems in Athens, Alabama that manufactures steering gear assemblies and other products.

From the broader perspective, the direct-served customers of TVA account for the purchase of about 12 percent of the electricity generated by TVA on an annual basis, and that amounts to something in the range of \$600 million dollars per year in electric bills. TVIC members tend to be very large, basic industries in such businesses as chemicals, paper and forest products, and primary metals such as steel and aluminum.

All of us are in highly competitive industries, and we are in favor of electricity being sold in this country on the same basis: with competition among the suppliers to serve the user needs for electricity, and fairness in those aspects of the business that will need regulation.

My testimony today represents General Motors' position, and it is also in line with discussions of the TVIC membership on this issue. TVIC is in the process of finalizing its position paper on how TVA should fit into electricity restructuring legislation, and we will provide that document to the subcommittee as soon as it is completed. A one-page summary of this testimony has been provided as was requested.

Let me begin with some general comments on the issue. We believe that TVA should be included in any national legislation that leads to the deregulation of the generation segment of the electric industry. Because of their large service territory and generation capacity, TVA is too important as a supplier of generation to be left out of the competitive markets. It is also in the best interests of the nation and the Tennessee Valley region for TVA to continue as an ongoing and viable utility, governed by a board appointed by the President and approved by the Senate. Under deregulation, customers who are now directly connected to the TVA distribution/transmission system should retain the right to that direct connection and not be forced to take service from a distributor.

Let me address timing. If the "fence" goes down and TVA is allowed to sell power beyond its current geographic area as defined by the TVA act, industry served by TVA should be allowed customer choice of generation supply as soon as the fence is removed.

In the area of generation, a separate regulatory structure need not be created for the operation of TVA's generation facilities; the marketplace will suffice. TVA's "stranded investment" is the result of debt incurred from its nuclear construction program. The 10-year debt reduction program adequately provides for TVA's requirements for recovery of stranded investment and no other stranded investment should be allowed. Customers can currently use options such as cogeneration and self-generation to minimize their electricity costs. All options currently available should continue to be available under deregulation—and not be subject to any transition or stranded investment charges.

As for transmission, TVA should be required to comply with all FERC transmission rules and regulations. Specifically, TVA transmission rates and conditions of service for industries served by TVA should be non-discriminatory and be no more restrictive in terms of access, rates or conditions of service than their charges to any other transmission customer.

Another important goal of deregulation is to create large Regional Transmission Organizations to create a more efficient transmission system and prevent "pancaking" of rates—in other words, prevent separate charges from each transmission organization as power is displaced through multiple grid systems. TVA should be a part of one of these large "Regional Transmission Organizations."

Finally, in the area of distribution, unless distributors opt into customer choice, tariffs, rates and conditions of service for organizations that distribute electricity from the TVA transmissions system to the end-user should be subject to regulation by their State Utility Regulatory Commission. Individual states and/or distributors should not be allowed to delay customer choice for industrial customers.

Thank you, Mr. Chairman, for the opportunity to share these views with the subcommittee this morning. As you move forward in the legislative process, we will be glad to provide whatever assistance you feel is appropriate. I will be happy to try to respond to any questions you may have.

Mr. BARTON. Thank you, Mr. Anderson.

We would now like to hear from Lyle Larson, who is the counsel for TVA Watch. We will put your statement in the record in its entirety and recognize you for 7 minutes to summarize it.

STATEMENT OF LYLE D. LARSON

Mr. LARSON. Thank you, Mr. Chairman and members of the panel. Thank you for inviting TVA Watch to testify today. I am Lyle Larson and I am from Birmingham and I serve TVA Watch as its counsel.

TVA Watch is a political and judicial coalition of public utilities concerned about unfair competition against TVA. Our members include American Electric Power Corporation, Duke Energy, Entergy Corporation, Illinova, LG&E Energy and SCANA Corporation.

TVA Watch sees TVA really as the tale of two companies. In the best of times, TVA is a partner, a partner in regional resource and economic development, a partner in environmental stewardship, flood control and lake recreation and a trading partner in the bulk power marketplace.

The other TVA is quite a different company. It is a TVA that has expressed intentions to compete nationally in deregulated power markets as America's power company. It is a TVA that we have had to sue three different times over the past 3 years to force it to comply with statutory limits on its authority. It is a TVA clothed with substantial subsidies which seeks immunity from meaningful application of the antitrust laws and is not subject to independent regulation of its power transmission or sales functions. It is a TVA that is burdened by \$27 billion in debt, \$8.5 billion of which is linked to non-productive assets.

So which is the real TVA? Is it a regional resource development agency narrowly focused on the welfare of the Tennessee Valley or is it an aspiring national utility? If it is the former, then TVA Watch believes that legislation on electricity restructuring would not need to address TVA. If it is the latter, then we believe that legislation must tackle the thorny and complex TVA issue.

By leaving the status quo, TVA would have an opportunity to continue to pay down its debt and get its financial house in order. In its 10-year business plan, TVA correctly observed that getting its debt cut in half by the year 2007 was job one. The GAO's report both in 1995 and again earlier this year confirmed that this was essential for TVA's competitive prospects.

If, after TVA has had an opportunity to get its finances in shape, there is a need to address the fence again, then the issue could be addressed then. At that point, TVA would be financially viable and would not need continued subsidies to compete. Taking the fence down when there is no compelling reason to do so and risking both the financial health of TVA and impairing the proper functioning of emerging markets is simply doing too much too soon. It is fixing a problem that does not yet exist and may never exist.

If, however, TVA wants to leave the Tennessee Valley behind and compete for load anywhere in the country, then Congress must act. Sound public policy and basic fairness would require that TVA engage the market on a non-subsidized basis. To understand why TVA subsidies would have to be addressed, just look at history. We

can see from the historical record that before the fence was erected and TVA was free to compete against public utilities, the result was predatory pricing and the elimination of competition.

Before 1959 when the fence was erected, TVA was responsible for approximately 20 investor-owned utilities being run out of the Valley. To quote former Secretary of the Interior Harold Ickes:

"The private utilities were confronted with the dilemma of facing competition or selling their properties to TVA. They could not do the former, so they did the latter. It was the club, extending the sturdy right arm of TVA that was supplied by the PWA that brought the private utilities to their knees and made it possible for TVA to become supreme in its field."

It was in response to this practice and because of TVA's subsidies and immunities from antitrust laws that Congress erected the fence in 1959. The rationale of the 1959 law continues to apply today.

Mr. Chairman, members of the panel, TVA Watch believes that the more things change, the more things stay the same. The debate over TVA today is amazingly similar to what it was 40 years ago. As this committee deliberates restructuring, it must determine the appropriate role for TVA. In doing so, we hope you will remain mindful of what the former Senator from West Virginia and a veteran of the New Deal Congress, Senator Jennings Randolph, said back in 1959 when the fence was erected.

He said, "At some time in the future when memories have dimmed and new faces have come upon the scene, the purpose of the prohibition against TVA supplying power outside the fence might be forgotten." We should not forget the lessons of the past.

In closing, TVA Watch believes the proper course of action on TVA depends on which TVA is the real TVA. Is it a regional resource agency narrowly focused on the Tennessee Valley, or is it an aspiring national utility that still wants to be America's power company? If it seeks to compete nationally, the Congress must address the thorny, complex TVA issue. If not, then we believe you can leave existing laws on TVA alone.

This concludes my remarks. Thank you.

[The prepared statement of Lyle D. Larson follows:]

PREPARED STATEMENT OF LYLE D. LARSON, COUNSEL, TVA WATCH

I. INTRODUCTION

Mr. Chairman and Members of the Committee: my name is Lyle Larson and I am a Partner in the law firm of Balch & Bingham LLP, based in Birmingham, Alabama. I am here today as Counsel to TVA Watch, a coalition of shareholder-owned utilities that was formed in 1996 to serve two public policy functions: First, to ensure that TVA complies with the TVA Act. Second, to promote policy discussion regarding the proper role of TVA in a competitive marketplace. Members of TVA Watch include American Electric Power, Duke Power Company, Entergy Corporation, Illinova Corporation, LG&E/Kentucky Utilities, and SCANA Corporation.

Over the past few years, TVA Watch's mission has been to maintain the bargain Congress struck in 1959: to confine TVA from expanding any further beyond serving the Tennessee Valley residents Congress originally intended it to serve. TVA should continue to serve that mission. Congress should not adopt a scheme for TVA expansion that could put fair competition in the industry at serious risk, not to mention Tennessee Valley residents, TVA bondholders and federal taxpayers.

It is our understanding that the purpose of this field hearing is to raise the profile of electricity restructuring legislation in the Tennessee Valley and make sure people are aware of what this might mean for electric customers here and for TVA. We

think customers in the Tennessee Valley should be aware that the rise of customer choice nationwide, and the possibility of federal restructuring legislation, necessitates serious discussions about the future role of TVA.

TVA Watch believes that, no matter what happens with the restructuring of the electricity industry, TVA's power program mission should remain the same. That mission is to supply power within the Tennessee Valley region. We believe that TVA's power program mission and orientation should stay focused exclusively on the Tennessee Valley region. In this regard, TVA Watch believes TVA's power system is performing well as was evident by its fine performance during the recent summer heat wave. TVA Watch believes the TVA power system should continue to serve its existing service area, but should not be authorized or encouraged by Congress to expand the scope of its power program mission to include the supply of power outside of the fence (where TVA, a governmental corporation in possession of a number of special advantages and the ability to wreak economic distortion, should not be permitted to compete against private enterprise on an uneven playing field).

However, TVA in recent years has embarked on a strategy aimed at persuading Congress to take down the fence. Among other things, TVA supports legislation introduced earlier this year by the Clinton Administration (S. 1047 and H.R. 1828) to remove the fence while allowing TVA to retain most of its subsidies and other artificial advantages. If, in fact, Congress considers changing TVA's mission to include the supply of power in competition with private enterprise outside the Valley, TVA Watch's members maintain that both basic fairness and sound economic and public policy require that TVA engage the market under the same rules and conditions as its private sector competitors. The public interest is not served and competition cannot develop if market participants are on an uneven playing field.

In order to chart a course for the future, it is necessary to know where we have been: to learn from past experiences and to seek to avoid making the mistakes that would undermine the goal of encouraging fair and open competition in America's electric power industry. With that in mind, it is helpful to review the history of TVA and what it is capable of doing if unrestrained in a competitive environment.

II. TVA COMPETITION—PAST TO PRESENT

1933-1959: TVA Displaces Shareholder-Owned Utilities

Between enactment of the TVA Act in 1933 and enactment of the TVA Bond Act in 1959, TVA grew its area of service quite rapidly taking over service territories served by various shareholder-owned utilities, including many members of TVA Watch. Following passage of the 1959 Bond Act and until very recently, competition between TVA and the shareholder-owned utilities has been virtually nonexistent. Between 1959 and today, TVA and its 159 distributors have operated largely "within the congressionally mandated fence" and shareholder-owned utilities operated outside.

From its outset, TVA was subject to the laws of Congress, but was not regulated by any other oversight body. It was (and remains) exempt from federal regulation, including that of the Federal Energy Regulatory Commission ("FERC"). Moreover, as a federal agency, it is generally immune from state utility (and other) regulation. The only effective form of regulation was Congressional oversight over the capital expenditures of TVA by virtue of the budget process. TVA, as a government agency, was controlled by congressional purse strings. It could not expand its asset base or geographic reach without justifying that expansion to congressional committees. While this proved to be a cumbersome process, TVA had some degree of accountability for its strategic direction.

In the 1930's, TVA consolidated its electric sales market by duplicating the facilities of the electric suppliers that served in the Tennessee Valley region prior to that time, or, when it could, acquired the existing facilities of the existing suppliers.

In constructing a federally subsidized network of transmission and distribution facilities, in testimony before Congress in 1934, then Chairman of the TVA Board Dr. Arthur E. Morgan confirmed these TVA practices:

Q. In purchasing these transmission lines, you have come to an agreement with the companies, that it is really an agreement under duress, is it not, because if they did not sell to you, you would duplicate their lines?

A. Yes.¹

¹ *Additional Appropriations for Emergency Purposes, 1934: Hearing Before the Subcomm. Of House Comm. On Appropriations, 73rd Cong., 2d Sess. 163 (1934).*

Over the course of the 1930's, TVA forced over twenty shareholder-owned utilities out of the Tennessee River Valley.² Explaining why shareholder-owned utilities were forced to abandon their services areas, Secretary of the Interior Harold D. Ickes stated:

The private utilities were confronted with the dilemma of facing competition or selling their properties to TVA. They couldn't do the former so they did the latter. It was the club, extending the sturdy right arm of TVA that was supplied by the [Public Works Administration] that *brought the private utilities to their knees* and made it possible for TVA to become supreme in its field.³

By 1940, the combined effort of these agencies was successful in establishing the Tennessee Valley as TVA's recognized "service area" and in driving all other power generators from the Tennessee Valley region.⁴ After TVA's rapid geographic expansion in the 1930's, TVA's rapid growth had more or less "stabilized."⁵ During the 1940's,⁶ TVA and neighboring utilities co-existed under an uneasy mutual restraint philosophy ("gentlemen's agreements") pursuant to which neither made excursions into the other's area of operations.

In the mid-1950's, TVA was chaffing under the fiscal restraints resulting from the inability to obtain budget approval for construction of new generating plant needed to serve customers located within the Tennessee Valley. The "Dixon-Yates" controversy of the 1950's involved an attempt by shareholder-owned utilities to build an electric generating plant to serve load in TVA's service area. That effort (a precursor of today's "independent power producer") was vigorously and successfully opposed by TVA. Yet, having defeated the development of the independent power producer's service in the Tennessee Valley, TVA was still without the capability of serving the load in the area because it still could not get federal approval for its own power plant construction. That gap was filled with a generating plant built by a TVA customer, the City of Memphis, using tax-free municipal bond financing.

This surrogate financing of generating facilities to serve the Tennessee Valley was not desirable from TVA's standpoint. TVA lobbied for freedom from the congressional oversight in building power plants to provide electric service in the area. Neighboring utilities expressed concern that this freedom could provide unfettered opportunities for TVA to expand the area in which it served. It was pointed out at the time that TVA had unnatural tax and financing advantages that could be decisive in any competitive battle outside the TVA area with those who both paid taxes and the market cost of money. The compromise in the 1959 Bond Act provided territorial restrictions on areas where TVA could sell power, but authorized TVA to borrow up to an established debt ceiling limit without the necessity for congressional approval of capital expansion plans. Both the "fence" and the debt ceilings established by the 1959 TVA Act Amendments continue to have a major influence on TVA's scope of operations and its business and political strategies.

1959-1992: Cooperation Replaces Competition

Historically, as the source of TVA's funding, Congress exercised significant oversight and control over TVA's geographic growth. In the 1950's, TVA sought to eliminate much of this Congressional oversight and control through proposed legislation providing for the issuance of revenue bonds by TVA. In *Hardin v. Kentucky Utilities Co.*, the United States Supreme Court recounted TVA's efforts and Congress' concerns:

In 1955 TVA began to seek authority to issue bonds to finance [the cost of new facilities without dependence upon annual appropriations from Congress]. Although TVA spokesmen assured Congress that the objective was not territorial expansion but only improvement of the facilities in TVA's existing service

²TVA, 1939 Annual Report, 50-51 (1940).

³Statement of Harold D. Ickes to Northwest Public Ownership League, as quoted in Sworn Testimony Before the Atomic Energy Commission (1941) (emphasis added).

⁴The Public Works Administration provided financial support to municipalities to establish municipal electric distribution systems that would duplicate the distribution lines of existing electric suppliers and become wholesale customers of TVA. Originally this support consisted of grants to the municipality of 30% of the cost of building the duplicating facilities with 70% of the cost being provided to the municipality in the form of a low interest rate loan. Later, this ratio was changed to 40% grant and 60% loan.

⁵*Kentucky Utilities Co. v. Tennessee Valley Authority*, 375 F.2d 403, 410 (6th Cir. 1967), *modified sub nom.*, *Hardin v. Kentucky Utilities Co.*, 390 U.S. 1 (1968).

⁶The slow-down in TVA's rapid growth was not of its own volition. Rather, through control over TVA's funding, Congress was able to check TVA's continued expansion. As TVA lamented in its 1955 Annual Report, "For the second successive year, funds for starting new generating units were not available." TVA, 1955 Annual Report 1 (1956). In 1956, TVA complained: "TVA must have access to other sources of funds if power to nourish the present rapid economic growth is to be provided." TVA, 1956 Annual Report 31 (1957).

area, many members of Congress were apprehensive and thought that if congressional budgetary control was to be weakened, some substitute to prevent territorial expansion should be found.⁷

Recognizing that allowing self-financing by TVA would decrease substantially its “power over TVA’s geographic growth,” Congress believed that “some substitute to prevent territorial expansion should be found.”⁸ Against this backdrop, Congress amended the TVA Act in 1959 to permit TVA to issue revenue bonds. The Congressional *quid pro quo* for relinquishing control of TVA’s purse strings was the territorial limitation, freezing TVA’s service area and halting TVA’s expansion. Both the House and Senate spent much time developing the new limitation—carefully reworking and revising it at different stages of the legislative process—with the final provision embodying the Talmadge-Randolph Amendment that had been adopted by the Senate. As passed by Congress, the TVA Bond Act added Section 15d to the TVA Act, which provides:

The Corporation [TVA] is authorized to issue and sell bonds, notes, and other evidences of indebtedness (hereinafter collectively referred to as “bonds”) in an amount not exceeding \$750,000,000⁹ outstanding at any one time to assist in financing its power program and to refund such bonds. [TVA] may, in performing functions authorized by this chapter, use the proceeds of such bonds for the construction, acquisition, enlargement, improvement, or replacement of any plant or other facility used or to be used for the generation or transmission of electric power (including the portion of any multiple-purpose structure used or to be used for power generation); as may be required in connection with the lease, lease-purchase, or any contract for the power output of any such plant or other facility; and for other purposes incidental thereto. **Unless otherwise specifically authorized by Act of Congress [TVA] shall make no contracts for the sale or delivery of power which would have the effect of making [TVA] or its distributors, directly or indirectly, a source of power supply outside the area for which [TVA] or its distributors were the primary source of power supply on July 1, 1957...**¹⁰

The depth and detail of the provision reveals a carefully hammered-out legislative compromise.¹¹

The intent of Congress in erecting the Fence was to protect shareholder-owned utilities from direct or indirect competition against TVA-generated power.¹² In *Hardin*, the Supreme Court recognized this fact:

[I]t is clear and undisputed that protection of private utilities from TVA competition was almost universally regarded as the primary objective of the limitation.¹³

⁷390 U.S. at 6.

⁸*Id.* During the 1930s and 1940’s, several lawsuits were filed by investor-owned utilities and their shareholders challenging TVA’s expansion into the electric utility business. While at least one early decision found unlawful TVA’s competition against shareholder-owned utilities, *Ashwander v. Tennessee Valley Authority*, 8 F. Supp. 893, 897 (N. D. Ala. 1934), the Supreme Court eventually upheld the legality of TVA’s power business. *Ashwander v. Tennessee Valley Authority*, 297 U.S. 288 (1935).

⁹Through a series of amendments, this figure has increased from \$750 million, to \$5 billion in 1970, to \$15 billion in 1975, and to \$30 billion in 1979. See 16 U.S.C.A. § 831n-4(a) (West 1985).

¹⁰16 U.S.C.A. § 831n-4(a) (West 1985) (emphasis added).

¹¹“But I remind the Senate that the pending bill, in its present form, is the product of travail and of fierce negotiation...it must contain the language of the Talmadge-Randolph amendment...” said Senator Robert Kerr, Chair of the Senate Committee on Public Works (the Talmadge-Randolph amendment revised the House version and was signed into law by President Eisenhower). 105 *Cong. Rec. S.* 13055 (1959). Legislative history is entitled to judicial notice. *Territory of Alaska v. American Can Co.*, 358 U.S. 224, 226-27 (1959).

¹²In passing the TVA Bond Act, Congress sought both to empower and to restrict TVA. TVA was empowered to issue revenue bonds, but was restricted from using the revenues from those bonds to compete against neighboring utilities. In erecting the Fence, Congress carved out a limited exception—the so-called “Exchange Power Exception.” In the Exchange Power Exception to the Fence, Congress permitted the continuation of a limited number of “exchange power arrangements” that TVA had with “other power-generating organizations...on July 1, 1957.”

¹³390 U.S. at 6. The strength and lasting durability of the Fence recently was reaffirmed and used by TVA to successfully insulate itself from competition within its boundaries. In 1992, Congress passed the Energy Policy Act, which authorizes the Federal Energy Regulatory Commission to compel utilities to transmit electricity generated by others into their service area, in direct competition with power they otherwise could provide. TVA lobbied for and secured a special exemption from this “open access” legislation. To obtain its exemption, TVA argued that, because it was not permitted to compete in any way, shape or form outside its service area, fairness required that others should not be permitted to compete within its area. See *Issues Within*

With passage of the 1959 TVA Bond Act, members of TVA Watch and TVA entered a period in which cooperation replaced competition and litigation. Under Section 15d(a) of the Act, the utilities were protected from direct or indirect competition with TVA. Simultaneously, Congress identified a limited exception—the so-called “Exchange Power Exception”—that could continue despite the general prohibition of Section 15d(a). In essence, the Exchange Power Exception permitted TVA and neighboring utilities to exchange power in order to avoid costs, achieving providing assistance in emergency situations, or coordinating operating procedures and maintenance schedules for the augmentation of reliability. For nearly 35 years, TVA and its neighbors enjoyed the mutual benefits of exchange power arrangements, which did not result in competition between them.

Seeking to quell congressional fears, former TVA Chairman David Freeman described in congressional testimony in 1979 the cooperation between TVA and its neighbors:

Mr. Chairman, for the last 20 years TVA has lived in peaceful coexistence with its neighboring privately owned power companies—to the mutual advantage of TVA, those companies, and the region's consumers. The TVA system is interconnected with those of private power systems at 30 separate points. Through common trust, understanding, and cooperation of the operating personnel and power dispatchers of all these power systems, TVA and its private utility neighbors are engaged in mutually beneficial power exchange arrangements that help keep the cost of power down for customers of all systems. And we bail out each other in times of emergencies.

The service area concerns of the 1950's were resolved in the 1959 self-financing amendment by putting a fence around TVA, as specified in section 15d(a) of the TVA Act.

... Since the adoption of those provisions of section 15d(a), *TVA has exercised great care to assure compliance with the restrictions contained in the Act* in entering into power supply arrangements with municipal and cooperative distributors of TVA power and with directly served customers, as well as in participating in interconnection agreements with neighboring electric power systems.¹⁴

This era of TVA's history was one of quiet expansion. Like other utilities across the country, TVA was convinced that there were significant economies of scale in larger generating plants, and it forecasted unending expansion of customer growth. TVA undertook plans to build large units to meet the rising demand. All this expansion was pursued without any regulatory oversight.

During the late 1960's and early 1970's TVA's management became convinced that nuclear power was the primary solution to the anticipated growth in the use of electricity. It developed plans for the construction of 17 nuclear generating units to serve the Tennessee Valley area (only 5 of which were completed, leaving \$6 billion in unproductive nuclear assets). This ambitious plan was extremely capital intensive, and TVA was projected to reach the congressionally established cap on borrowing authority by the early 1980's. In 1979, TVA approached Congress, proposing to increase the limit on its debt from \$15 billion to \$30 billion. At that time, Congress extracted promises from TVA giving assurances that none of the plants constructed with this increased borrowing authority would be used to sell power in areas outside the Tennessee Valley.

Given assurances that TVA had no plans to expand the geographic reach of its power program, Congress authorized the doubling of TVA's limit on borrowing from \$15 billion to \$30 billion. This allowed TVA to go forward with its nuclear construction program without further oversight from Congress. That freedom proved unhealthy because TVA had neither competitive forces nor an independent regulatory organization forcing it to examine and re-examine the validity of its assumptions.

By the 1980's TVA's plans were in grave danger. Electricity consumption in the Tennessee Valley had not grown at the rate projected. The increased regulatory burdens imposed on all developers of nuclear power facilities by the Nuclear Regulatory Commission added significant costs to TVA's programs. While other regulated shareholder-owned utilities were revising and scaling back and abandoning plans for nu-

the Jurisdiction of the Subcomm. On Water Resources contained in the Comprehensive National Energy Policy Act: Hearing Before the Subcomm. On Water Resources of the Comm. on Public Works and Transportation, 102d Cong., 2d Sess. 64, 7 (April 9, 1992) (Statement of Mary S. Hayes, President TVA Customer Group).

¹⁴ *Hearings on H.R. 2686 and H.R. 5059 Before the Subcomm. On Water Resources of the Comm. On Public Works and Transportation, 96th Cong., 1st Sess. (1979) (Testimony of S. David Freeman (emphasis supplied)).*

clear plants in response either to economic realities or pressures from regulators, TVA plowed ahead with its nuclear program. During the 1980s, TVA added substantial debt (tens of billions of dollars) to its balance sheet but got little out of its nuclear investment.

By the 1990s, many thought that TVA was on the ropes, and only a period of a few years separated TVA from financial collapse. That downward spiral was arrested, however, following the appointment in 1986 of Marvin Runyon as Chairman of TVA. He approached the operation of TVA like a business.

But these efforts were simply band-aids that stopped temporarily the hemorrhaging that was going on in TVA's finances. Even with Runyon's efforts and dramatic accomplishments, TVA was not able to overcome the dramatic financial drain created by its unfinished nuclear plants. By the end of fiscal year 1993, TVA had approximately \$28 billion in debt. Its balance sheet showed the net book value of its productive assets (that is, those in operation furnishing electric service) at only \$14 billion. The other \$14 billion was tied up in \$8 billion of plants under construction which may not be placed in service, and \$6 billion in "deferred nuclear plants." TVA's customers were having to pay rates that would allow TVA to maintain the debt service on \$14 billion in unproductive plant assets--almost \$1.1 billion per year. Had TVA been regulated by a state or federal regulatory authority, it would have had to amortize a major portion of the \$14 billion in unfinished and deferred plants over a reasonable period of time. TVA would have had to raise its rates substantially to current customers.

1992 To The Present: TVA Seeks National Relevance

The 1990s have seen a shift in TVA's traditional policy. TVA's current management has expressed frustration over TVA's inability to sell its power outside the fence and declared its desire to revert to the pre-1959 days when TVA legally could sell power to wholesalers and, through those wholesalers, indirectly become a source of power supply outside the fence. Speaking to the Public Power Association in 1995, TVA's Chairman said:

You all know the complex history of the fence that has surrounded TVA's service area since 1959. Many of you have similar territorial boundaries, with equally complex histories. These boundaries are part of a system of regulation that's governed our business for more than 30 years.

The fence around TVA's service area was put up at the insistence of private power companies when the TVA power system became self-financing. The Fence was intended to be a bulletproof vest for our competitors. It has become a strait-jacket for TVA.

...
The fence should come down. As we look toward an era of open market competition, the fence no longer makes sense. And when it does come down, competition will be a two-way street, and TVA will once again have the freedom to compete anywhere in the country.

We had that freedom until 1959. It's time we had it again. It's time to set TVA free.

TVA's current management has worked hard to emphasize that TVA was not afraid of change and was making changes to get ready for restructuring and to win the competition with shareholder-owned utilities.

As detailed above, TVA has substantial debt associated with unproductive or under productive generating capacity. The associated debt service burden has placed upward pressure on its rates charged to its wholesale distributors. To help it obtain additional revenue, TVA in late 1995 implemented aggressive programs with various power marketers to sell TVA generated power for resale by those marketers into the burgeoning bulk power marketplace. TVA hoped to use these revenues to pay down part of its outstanding debt and thus to relieve some of the upward pricing pressure that was being asserted. TVA hoped also that its sales into the bulk power market would help it to become established as a reputable bulk power supplier and thus to gain a foothold for the future when, it believed, the fence would be removed and it would be free to market its power directly and nationally. This initiative, however, was illegal and has now halted due to adverse judicial rulings stemming from claims brought by TVA Watch member companies. As of the close of 1997, TVA had ceased to be a supplier of power in the bulk power marketplace, outside of opportunity sales to neighboring utilities.

Beginning in middle 1995, TVA began speaking publicly about the need for changes to the TVA Act to remove geographic restrictions on its sale of power. TVA also commissioned and circulated widely a consultant report (Palmer Bellevue) concluding that TVA was ready to compete and win, but was hamstrung by the fence. At the same time, however, TVA advocated that it should continue to be protected

from competition within its historical territory and should be permitted to retain the benefits it has (financially) as a result of being a creature of the United States Government. TVA's efforts in this regard have been effectively countered by TVA Watch and others on the basis that TVA is heavily subsidized and should not be able to compete outside its area unless its subsidies are removed, the playing field is level, and TVA opens itself to competition within the fence.

III. ON THE INSIDE LOOKING OUT: TVA'S FRUSTRATED EFFORTS TO SELL POWER OUTSIDE THE VALLEY WITHOUT CONGRESSIONAL APPROVAL

In 1995 the U. S. General Accounting Office¹⁵ chronicled TVA's legislative strategy to tear down the Fence and expand its market:

[I]n February 1995, TVA's Chairman stated that in recognition of evolving competitive markets, legislative provisions that prevent TVA from transmitting *and* marketing its power outside of its established service area should be eliminated, so that TVA can compete on an equal footing with its neighbors.¹⁶ The Chairman added that the "fence" should come down, "unleashing the agency's potential as a nationally competitive electric utility."

As part of the Chairman's February 1995 announcement, he also stated that TVA had commissioned a study to examine all aspects of removing the fence before seeking necessary legislation. The study's report, released in April 1995,¹⁷ recognized that TVA faces radically different conditions today because of the realities of the rapidly changing electric industry. The [Palmer Bellevue] report included the following findings.

... So that TVA can evolve as a fully competitive enterprise and assure its current wholesale power customers a wide range of choices in the future—including supplies from other power generators—the Board is recommended to undertake a two-phase effort to remove the "fence" and related restrictions. Phase 1 would allow TVA to conduct all conventional types of wholesale business with utilities bordering TVA and beyond. During Phase 1, TVA would not be allowed unbalanced access to traditional nonprofit wholesale customers of neighboring utilities, with which TVA's relationship has been severely restricted since 1959 and which cannot serve in the TVA territory under the TVA Act. Phase 2 would remove the "fence" entirely, giving TVA's current wholesale customers free market access and at the same time permitting TVA to seek markets outside the Valley on the same basis that competitors could enter the Valley to provide service.

TVA's transition to a fully competitive posture is not hindered by an inherent inability to compete on a vigorous and equal basis with others. Instead, the barriers to TVA's competitiveness are largely found in ties to the past and the *limitations imposed by unusual and unique provisions in federal law*.

GAO Report at 55-56 (emphasis added). In reaching its own conclusions about the Palmer Bellevue Report, the GAO found:

The Palmer Bellevue study does not recommend immediately opening the market to full competition. The study recommends that TVA be allowed to sell to customers outside its current service area for an unspecified period while continuing the restrictions that make it difficult for competitors to enter TVA's market. *An important issue to consider in analyzing the study's recommendation is the equity of a proposal that solely benefits TVA to the potential detriment of TVA's competitors.*

GAO Report at 56-57 (emphasis added). Chairman Crowell commented on the Palmer Bellevue Report:

TVA recently commissioned a highly regarded utility consulting firm to conduct a study of the fence and recommend a course of action for removing it. The firm—Palmer-Bellevue... concluded that TVA is competitive to compete without the fence. *But rather than seek legislation to remove it immediately, we have de-*

¹⁵ United States General Accounting Office, *Tennessee Valley Authority—Financial Problems Raise Questions about Long-term Viability*, GAO/AIMD/RCED—95-134 (August, 1995).

¹⁶ (footnote in original text) The Chairman's announcement, however, did not indicate that TVA wished to remove statutory provisions in the Energy Policy Act of 1992 which generally prohibits other utilities from transmitting power over TVA's transmission network and selling the power to TVA's customers.

¹⁷ (footnote in original text) *The Ties That Bind: TVA in a Competitive Electric Market*, Palmer Bellevue, April 1995.

*cided on a phased approach, timed to match the pace at which deregulation proceeds.*¹⁸

These statements have been followed by specific deeds, all of which have been fought in the courts by various members of TVA Watch. TVA Watch members have challenged a number of TVA's acts of aggression along (or around) the fence. Each challenge (reviewed below) has resulted in TVA's efforts either being found unlawful, or in TVA's capitulation.

Alabama Power Company, Georgia Power Company and Mississippi Power Company v. TVA—In 1996 TVA entered into a set of arrangements with LG&E Power Marketing ("LPM"), an affiliate of a Louisville Gas & Electric which was power generating organization authorized to "exchange" power with TVA under the TVA Bond Act. Under these arrangements, LPM would buy power from TVA on paper but never actually "exchange" or take physical delivery of that power. Instead, LPM would resell the paper rights to that power to third parties for use outside the Fence, sometimes as far away as the Chicago and South Florida. Because Section 15d(a) of the TVA Act prohibited TVA from supplying power outside the Fence, and because the "Exchange Power Exception" does not permit TVA to supply power to a neighboring utility for the purpose of resale in distant markets, Southern Company Operating Companies sued TVA and LPM in Birmingham, Alabama. The lawsuit sought an injunction stopping the transactions and a declaration from the Court stating that the arrangement was unlawful.

Senior United States District Judge Robert Propst found against TVA and ruled that the arrangement with LPM was illegal.¹⁹ He found that LPM, as a power marketer and not a neighboring utility with which TVA was truly "exchanging power" power generating organization, was not entitled to engage in power supply transactions with TVA. In the Court's view, if TVA could supply power for use in South Florida or Chicago through the device of channeling the power on paper through a power marketer, the prohibition on TVA supplying power outside the fence would mean nothing.

Alabama Power, Duke Power and Entergy Mississippi v. TVA—Less than a year after the Northern District of Alabama found TVA violated the TVA Act by "indirectly" selling power through a power marketer, TVA was sued again for virtually the same activity. This time, the plaintiffs included Duke Power and Entergy Mississippi. TVA's accomplice this time around was East Kentucky Power Cooperative. The only distinction between the two suits was that TVA channeled its power through an actual power generating organization authorized to purchase and consume power generated by TVA rather than a power marketer. After initially denying the complaint, TVA eventually capitulated and agreed to a Consent Judgment²⁰ forbidding TVA from making any more deals to supply power indirectly in violation of the fence by "indirect" means. TVA also agreed to adopt a Policy Statement with regard to its supply of power to neighboring power generating organizations under the Exchange Power Exception.

Kentucky Utilities vs. TVA and Powell Valley Electric Cooperative—In late 1996, TVA entered into a three-way transaction to capture a large industrial load served by Old Dominion Power Company, a unit of Kentucky Utilities. The transaction had the following elements: The customer, a large mining operation, had historically taken service from Old Dominion. With help from TVA and from a TVA distributor (Powell Valley Electric Cooperative), the customer built a transmission line into the service area of Powell Valley. TVA and Powell Valley then entered into an agreement to supply power to the customer with delivery inside the Powell Valley service area but for use outside of that area (and inside the territory of Old Dominion). In response, suit was filed in both Federal Court and at the Virginia Corporation Commission ("Virginia Commission").

In mid-summer 1999, the Virginia Commission rendered its decision and rules against and Powell Valley.²¹ The Virginia Commission proceeding has resulted in a major victory, not just for Kentucky Utilities, but for state-regulated public utilities in general. In upholding the primacy of state laws governing electric service territories over the TVA Act, the Virginia Commission ruled that: (1) Powell Valley's delivery of power to customers inside the fence for use outside the fence (and in Old

¹⁸Remarks of Craven Crowell, "Tailoring the Seamless Enterprise: An Integrated Approach to the Challenge of Deregulation," Conference on Building the Seamless Enterprise, at 7 (Sept. 19, 1995) (emphasis added).

¹⁹*Alabama Power Company, et al v. TVA*, 948 F. Supp. 1010 (N.D. Ala. 1996).

²⁰Consent Judgement Entered July 29, 1997, Civil Action No. CV-97-C-0885-S (N.D. Ala. 1997) (Judge U.W. Clemon).

²¹*Re Kentucky Utilities Company dba Old Dominion Power Company*, PUR Slip Copy, 1999 WL 288835 (Va. S.C.C., March 31, 1999).

Dominion's state-sanctioned service area) was unlawful under Virginia state law; (2) the fact that the TVA Act authorized the supply of TVA power by Powell Valley in the area in question did not change this result, because the TVA Act does not preempt state laws governing service territories; and (3) that distributors of TVA power do not obtain any immunity from state laws other than retail rate regulation by virtue of their relationship to TVA. Powell Valley sought rehearing of the Virginia Commission's order. The petition for rehearing has been denied and the parties (KU and Powell Valley) have resolved the matter completely by transferring service of the customer back to KU. In return for Powell Valley's cooperation in restoring lawful service, KU has agreed not to seek money damages against Powell Valley for its role in the matter. However, a damage claim against TVA in the Federal Court in Kentucky remains pending and a trial on the merits of the matter is anticipated to produce a judgment against TVA. As can be seen from the above cases, all of which TVA has lost, under current management TVA has not hesitated to push the envelope well beyond what is legal. If not for the resolve of TVA Watch and its members, TVA would have successfully removed the fence by disregarding the dictates of Congress.

IV. LEGISLATIVE CHANGES REQUIRED IF TVA ALLOWED TO SUPPLY POWER OUTSIDE THE FENCE

Under Section 15d(a) of the Tennessee Valley Authority Act of 1933, as amended, TVA is prohibited from making contracts for the sale or delivery of power that have the direct or indirect effect of making it a source of power supply outside a statutorily defined area. As noted above, this provision of law is generally referred to in the electric utility industry as the "fence" and applies with limited exceptions to affirmatively prohibit the direct or indirect marketing of TVA generated power outside the Tennessee Valley region. The Supreme Court of the United States has recognized that the "fence" was erected to protect utilities from having to compete against TVA power because of the privileges, benefits and artificial competitive advantages TVA possesses as a government corporation. If TVA power is to be made available outside the confines of the fence, a number of changes to Federal law should be made to ensure fairness and to prevent economic distortions:

Make Antitrust Laws Applicable to TVA: Courts have recognized that TVA is immune from liability under the antitrust laws even though it is engaged in competition in electric service markets. This immunity has been based on either (1) TVA's status as an instrumentality of the federal government, or (2) the implicit structure of the TVA Act. If the fence that currently prevents TVA from even broader engagement in the competitive arena is removed, it will become imperative that the antitrust laws are applied to TVA. To assure parity and symmetry among competitors, TVA should be subject to the same rules on competition as all other participants in the market, and it should be legally prohibited from repeating the predatory practices used in the past.

No New Subsidized Generation. In response to ongoing Congressional budget deliberations and the potential that its debt limit may be reduced to \$27,000,000,000, TVA recently has issued statements that it may need to build one or more new power plants. TVA should not be permitted to build any new power plants on a subsidized, tax-exempt basis unless and until it makes a showing that the capacity is necessary to satisfy its firm commitments in the Tennessee Valley region only as a last resort and only after all alternatives (including giving distributors the option to meet their growth needs through purchasing power from a supplier other than TVA) have been exhausted. TVA has undertaken voluntarily to enter into contracts with its distributors and it has no statutory obligation or inherent right to take on the responsibility to meet all the power needs of the region during times such as these where a wholesale market capable of meeting the growing demands of the Valley.

Civil Liability. TVA claims generally that it is immune from any lawsuits for injuries or damages arising out its sale of power (such as for breach of a power sale contract). TVA also enjoys exemption from any requirement to pay prejudgment interest or punitive damages. *See* 28 U.S.C. § 2674. TVA's potential competitors in the electric power industry do not receive such benefits—they can be challenged and penalized for such indiscretions as overcharging customers.

Equal Application of Regulations: Under current law, TVA is exempt from regulation of many of the federal authorities that oversee shareholder-owned utilities. This places TVA above the law and, if these exemptions are allowed to continue, it will distort the competition which TVA seeks. Exemption from equal regulation destroys parity and symmetry with investor-owned utilities

with whom TVA would compete. If TVA is to be allowed to expand its operations to engage in nation-wide competition, it should be subject to the same regulation applicable to its competitors at the federal level. Congress and the courts have recognized the important interests that states have in the regulation of the suppliers of electric service. TVA should not be exempt from application of those regulatory oversights. The regulation that must be imposed on TVA includes the following: (1) FERC regulation of rates for electric service and transmission services in the same manner as shareholder-owned utilities; and (2) FERC regulation of hydroelectric activities of TVA.

Payments in Lieu of Federal Income Taxes: State and federal tax collectors are denied over \$500 million annually in income taxes that would be paid by a comparable-sized investor-owned utility. In order to achieve parity and symmetry among competitors, Congress should adopt a provision making TVA responsible for paying federal income taxes that requires TVA to pay an amount equal to the federal income taxes that other potential competitors pay to help bear the cost of the federal government.

Payments in Lieu of State Income Taxes: TVA's exemption from state income taxes should also be eliminated. In order for TVA to pay its fair share of the cost of government that must be borne by TVA's competitors, Congress should require TVA to pay the states the otherwise foregone taxes.

State and Local Ad Valorem and Other Taxes: Similar to the avoided income taxes because of TVA's federal status, it escapes approximately \$461.7 million annually in state and local ad valorem and other taxes. This lost tax revenue is over and above the "payments-in-lieu-of-taxes" that TVA currently pays. Requiring such payments would establish parity and symmetry among all competitors by furnishing to state and local governments needed revenue that currently is not paid by TVA and not included in the cost of electric services supplied by TVA.

Payment to Federal Treasury for Equity Support: Despite its poor financial condition, TVA has been given an AAA rating on its bonds by Moody's Investment Service and Standard & Poor. This rating has nothing to do with its business acumen, efficiency, or the strength of its balance sheet. Rather, as explained by Moody's, the rating is due to the implied promise by the federal government to come to TVA's rescue in times of fiscal difficulty. TVA has done nothing to dispel the myth that its debt is backed by the Treasury and, in fact, encourages this false assumption. The federal government is thus providing the equity backstop (or implied guarantee) for TVA's credit rating and its ability to borrow money at "risk-free— rates of interest. Moreover, certain bond issues by TVA are guaranteed by the U.S. Treasury. See 16 U.S.C. §§ 831n through 831n-3. Under 16 U.S.C. § 831n-4 (the power operations bond authorization), bonds are not guaranteed by the U.S. Treasury, but TVA can require the U.S. Treasury to buy its bonds during times that the market is not receptive to issuance of bonds by TVA under the terms and conditions needed by TVA. TVA should pay the federal Treasury for this equity support in an amount each year equal to the difference between TVA's annual cost of money and the average cost of money for all utilities subject to FERC's jurisdiction.

CONCLUSION

In summary, we think TVA should stick to its mission. Congress should not take the fence down, and it ought to think long and hard about the competitive and public interest consequences to competition of doing so. If for some reason Congress decides to remove the fence, Congress should put TVA on even footing with its competitors so that all consumers will have the same opportunity to experience the benefits of truly efficient markets.

Mr. BARTON. Thank you, Mr. Larson.

We are going to have 10-minute question rounds for each of the Congressmen and hopefully we can have only one round of questions, but if we need more, we are going to have more.

The Chair is going to recognize himself for the first 10 minutes.

I want to start with Mr. Medford. It is my understanding that under current law, the Tennessee Valley Authority is subject to no authority except for specific acts of Congress and the Presidential appointment authority of the board; is that correct?

Mr. MEDFORD. That is true with respect to rate-setting authority. I am making a distinction there. There are many areas, for example, regulation of nuclear power, regulation of environmental activities——

Mr. BARTON. I understand.

Mr. MEDFORD [continuing]. Where TVA is subject to the same Federal authority that other large utilities are subject to.

Mr. BARTON. Now I guess with the exception of Mr. Larson, if I understood him correctly, there is not any other of the four members of the panel here that support the continuation of the status quo, is that correct, including the TVA?

Mr. FLEMING. That is correct.

Mr. BARTON. Now, it is my understanding that with regards to transmission, the TVA does—if not support, it does acknowledge that the Federal Energy Regulatory Commission should have authority—if we go to a comprehensive competitive model nationally, should have authority over transmission; is that correct?

Mr. MEDFORD. That is correct.

Mr. BARTON. In terms—I want to get a little bit into this stranded cost issue. Congress sets a debt limit for the amount of debt that TVA can issue, is that correct?

Mr. MEDFORD. That is correct.

Mr. BARTON. And that statutory ceiling is \$30 billion?

Mr. MEDFORD. That is also correct.

Mr. BARTON. And currently today, TVA has outstanding debt of a little over \$26 billion?

Mr. MEDFORD. That is also correct.

Mr. BARTON. Is it \$26.7 billion?

Mr. MEDFORD. That is the best number I have, yes.

Mr. BARTON. Okay. Well, that is the best number I have too, so that is probably the best number.

Of this \$26.7 billion, what Mr. Larson referred to as non-productive, that number is somewhere between \$6 and \$8 billion; is that correct?

Mr. MEDFORD. I would want to check that, but that sounds like a good range.

Mr. BARTON. And is that a euphemism for nuclear costs?

Mr. MEDFORD. I would not call it a euphemism, I would say that the bulk of that is incomplete nuclear construction.

Mr. BARTON. Incomplete nuclear construction, okay. Now if we have a national restructuring bill and there are provisions in it for stranded cost recovery—and most of the Congressmen on the subcommittee on both sides of the aisle support an ability for utilities, as we move to competition, to obtain stranded cost recovery—in most States, that is a decision that is going to be made by the public utility commission of that State. The Federal law would allow stranded cost recovery but we would leave it up to the States to determine how stranded costs should be recovered. In the instance of the Tennessee Valley Authority, since under current law, TVA is not subject to PUC regulation in any of the States, how would TVA stranded costs be determined?

Mr. MEDFORD. We think it is appropriate for FERC to determine stranded costs.

Mr. BARTON. So you would give the Federal Energy Regulatory Commission that authority?

Mr. MEDFORD. That is correct.

Mr. BARTON. Okay. Mr. Fleming and Mr. Baker both referred to the fact that under current law, there is basically a continuing contract with your customers, it is a 1-year contract but it is renewed every—you have to give a 10-year notice every year if you do not want to renew it. So for all intents and purposes it is a 10-year contract. Both Mr. Fleming and Mr. Baker said they thought that that notice should be shortened, but I do not believe either of you gentlemen told us how short it should be.

Do Mr. Fleming or Mr. Baker want to put a specific shortened period on the record?

Mr. BAKER. There are several contracts actually that are in effect between TVA and its distributors, I think there are still some 15-year contracts that are in effect. Probably the most common contract is what is called a 5 and 5, it is a 10-year contract that has a 5-year—when it was originally signed, it had a 5-year delay before you could initiate a termination procedure. So it was a 5 and 5, as the terminology—

Mr. BARTON. Well, how in this grand new world of competition if we get there—what is your recommendation about how we handle the existing contracts and what kind of a new contract requirement would you propose?

Mr. BAKER. The distributors have a little range there that probably ranges from about a year to 2 years up to 3 year notification under it. We have been in negotiations with TVA, there should be an adequate period to allow for TVA's planning horizon for generation under it. So we are in somewhat of a—not necessarily a disagreement but there are some varying views on the length, but somewhere in the 1½, 2, 2½, 3 year range, we think is an adequate notification.

Mr. BARTON. Mr. Fleming, do you agree with that?

Mr. FLEMING. Mr. Chairman, Memphis and Knoxville I believe have the 10-year notice contracts that are longstanding, and we have advocated a 1-year termination notice, principally for the reason of trying to create some leverage with TVA to be able to negotiate a new contract.

Mr. BARTON. So your recommendation is you want a 1-year contract and a 1-year notice, so you would have a 2-year time period?

Mr. FLEMING. Actually, we have advocated a 1-year from date of enactment of any legislation.

Mr. BARTON. Okay, now Mr. Medford, based on what Mr. Baker said and Mr. Fleming said, what is TVA's position on that?

Mr. MEDFORD. Mr. Chairman, we believe that given the requirements of both transmission and generation planning, we think a 3-year notice period is appropriate.

Mr. BARTON. Okay, 3 years. Now are there any special situations on this 5 and 5 situation that Mr. Baker was referring to that again in a Federal bill for a transition period we should have a special one time only provision for some particular contract, or would TVA be happy if we went to a generic situation after a date certain, say after 2002 or something like that? Do you understand what I am saying? I think we have got agreement here that you are will-

ing to change your contract terms, but what I am asking is is there some unusual contract out there, for whatever reason, that needs special protection even within a transition period?

Mr. MEDFORD. No, Mr. Chairman, there is not.

Mr. BARTON. Okay. Now I want to touch on the non-controversial issue of new generation for TVA. I know that nobody has thought about that.

Again, let us assume that we get to a competitive model. We are not there, but let us assume that we could waive our magic wand. If TVA were allowed to build new generation, in this new environment, would the bonds be backed by the U.S. taxpayer, would they be backed by the State taxpayers or would they be backed by no taxpayers?

Mr. MEDFORD. Well, the bonds are currently backed by no taxpayer and I would assume that would continue to be the case.

Mr. BARTON. Okay, now are they tax exempt bonds or are they—

Mr. MEDFORD. They are not tax-exempt bonds.

Mr. BARTON. So it is a commercial bond?

Mr. MEDFORD. I believe they are exempt from State tax, but they are not exempt—none of our debt is exempt from Federal tax.

Mr. BARTON. But under current law—I mean this has never happened because TVA has, I think, done a good job of managing its bond portfolio, but if the TVA Governors grabbed all the cash in the safe and headed to South America, to take an extreme case, and defaulted, who would pick that up? I am led to believe that ultimately the U.S. taxpayer would be the payer of last resort because TVA is a Federal agency. Even though there is no statutory obligation, that learned counselors in law firms that bill for big dollars have determined that in a worse case scenario, it still is the U.S. taxpayer that is liable. Is that true or not true?

Mr. MEDFORD. Well, you are right, Mr. Chairman, I think the law does not offer an answer to that question. As I mentioned, all of our debt carries the caveat that it is not backed by the Federal Government. It is difficult to visualize what would happen in the eventuality you mentioned, and clearly it is TVA's intention that we never get to that eventuality.

Mr. BARTON. And I—look, that is a very hypothetical question. I made an extreme case simply to try to clarify the legal situation, because as I said before I asked the question, TVA I think has done a good job of managing its debt that is on the books. So I am not at all trying to imply otherwise.

Mr. MEDFORD. The strict legal answer would be that the bondholder would be the one who would bear the cost.

Mr. BARTON. Mr. Larson or Mr. Anderson or Mr. Fleming or Mr. Baker, of the panel members here, do your groups support TVA being allowed to build new generation capacity if it is explicit that it is a purely commercial bond and there is no government entity that is liable for the default? If they are treated like General Motors or IBM or any other entity, Enron Corporation, that might want to build a merchant plant; are any of you opposed to that?

Mr. ANDERSON. Mr. Chairman, in a deregulated environment at a point where other utilities are able to compete in the generation market, TVA should be able to compete in that market and that

would require then the opportunity to put in generation resources if they felt that the market was there to support it.

Mr. BARTON. Mr. Larson.

Mr. LARSON. Well, I think it depends on which TVA is the real TVA. If the fence is staying up or even if TVA is focused on the Valley—

Mr. BARTON. Well, assume the fence comes down. I said a perfect competitive world, which I do not even think the Congress is going to be able to do a perfect competitive—but let us assume we are more perfect than we are today.

Mr. LARSON. I would say no, unless all of TVA's subsidies are addressed and the implicit guarantee of the Federal Government of TVA's bond is just one of those. But it is not, by any means, everything. I would point out that—

Mr. BARTON. What if we let TVA create a subsidiary, a wholly owned subsidiary that is subject to the same tax laws and the same regulatory model, but they do have, you know, TVA in their name?

Mr. LARSON. I would say then we would not oppose TVA coming out of the fence. As testified to earlier, if TVA wants to become a national utility and build independent—

Mr. BARTON. And this is not anything they have asked, I am just thinking out loud, so this is not anything that has been pre-programmed or anything.

Mr. LARSON. Right. No, again, TVA Watch believes TVA can remain subsidized and stay in the fence and that is fine, but if TVA wants to come out of the fence, if it wants to build a power plant, a merchant power plant in Houston, Texas right next to a merchant plant being built by Enron and across the street from a power plant being built by Dynegy, they ought to all be on a level playing field. And if TVA is a government IPP, if you will, that is tantamount to the U.S. Air Force entering competitive airlines, unless you address, you know, the complicated issues of addressing the TVA subsidy situation.

I will point out that TVA does not have an absolute obligation to plan for and meet the needs of the Valley, it voluntarily entered into full requirements contracts with its distributors and it can voluntarily amend those contracts.

Mr. BARTON. My time has expired.

Mr. MEDFORD. Mr. Chairman, may I make one comment?

Mr. BARTON. Sure.

Mr. MEDFORD. I would like to address one of Mr. Larson's concerns and in doing that I will read to you the entirety of TVA's vision: "Generating prosperity in the Valley." That is how TVA sees itself, that is how we focus our efforts. Mr. Larson described two possible TVAs, I want to assure him that it is the TVA that focuses on the Valley that we focus our attention on.

Mr. BARTON. Well, my time has expired, but my learned counsel has asked me to ask one more question.

Would TVA be willing to limit its building of new generation to the needs of the current territory it serves within the Tennessee Valley, or does your vision—do you want to expand your vision to generate prosperity for America as opposed to for the Valley?

Mr. MEDFORD. Most of the legislation that has been drafted includes a provision like the one I am going to mention, and I think

this provision adequately addresses the issue of generation. First, most legislation would limit us to selling at wholesale outside the Valley. No retail whatsoever—absolute prohibition.

Mr. BARTON. But you would have to build the capacity within the Valley to sell at wholesale outside the Valley.

Mr. MEDFORD. Well, and let me talk about wholesale outside the valley. Most of this legislation also contains a provision which indicates that we would only sell excess capability. Certainly from time to time—I mean you build generation in rather large chunks, if you are going to do it economically.

Mr. BARTON. Right.

Mr. MEDFORD. From time to time, we will have some excess generation. Certainly on an energy basis during the course of a year, you will have periods where you have substantial excess energy.

Mr. BARTON. Right.

Mr. MEDFORD. We endorse, by the way, both of those restrictions. Both of those restrictions are in the administration's title, to name one, and we have endorsed that title. I think that is the only limitation that is really needed on TVA's ability to build generation.

Mr. BARTON. Thank you. Mr. Hall is recognized for 10 minutes.

Mr. HALL. Thank you. And I think this very able bits of testimony here cries out one thing to us and that is that we do have a daunting decision to make and I guess all of us are parochial, you want something that is best for your Valley, we want to represent our districts and our States and yet, we know what the word deregulation means. Deregulation means deregulation with no benefit for anyone and opportunity for everyone. We start off with a real problem. I think all five of you gentlemen are concerned about the consumer because the consumer makes our wheels turn, and our goal is competition that will drive down costs and keep quality.

But I have concern about the littlest consumer here in this city and this State, the poorest, littlest consumer that lives at the end of the poorest street. I am not naive enough to think that they can cope with the Enrons or others that can bid for better prices, it is just not—does not happen in the marketplace. But our goal is to try to lower the rates for everybody accordingly, I guess is the way to put it. And while that may not be what Jeremy Benson called for in the greatest good for the greatest number, it still gives that littlest person some representation through this committee.

But I am sorry for this Tennessee group because they want to—I will not say bring home the bacon, they want to keep the bacon, they want to represent the people that sent them up there and they are doing a good job of that, but you know, they are in a pretty tough position defending some of the things that I have heard here today.

During the time I have been in Congress, we have had thrusts—the Clinch River problem, for example, I think we made a mistake there when we left the billions of dollars on the table and killed that program, because we might have had some benefit from it by this time. But Mrs. Clinton's health bill was good for everybody, but those that she had to have to make it work, they did not include the administrators, the insurance companies, the other people in the health facilities, in the bill, they were not inside the tent—had to have that absolutely to make it work. And when we

deregulated airlines, Mr. Chairman, did Harding Lawrence of Braniff Airlines ask for five new routes, 10 new routes or 20 new routes? He asked for 500 and something new routes.

So it is a partnership thing. And I would say in behalf of these men and the women that represent you at the State, Federal and local level in Congress and in the other areas of public service, that you ought to get together if you possibly can. I think Mr. Larson and Mr. Medford are poles apart right now, but you all represent the business area and if you want a business decision, you ought to have some give to you and get together and work out something to bring to these men on this committee to try to help sell this Chairman and sell our committee on what is really best for you. And I think you had better get ready to make some concessions, just like all of us are going to have to.

I am pleased—I do not note any problem about stranded costs. Do any of you have any problems with the fact that stranded costs ought to be received? You know, at first, there was a large segment that said no stranded cost, let them eat those because they were bad decisions when they made them and bad decisions now. Well, that was not true. We have come along now to where everybody expects that we ought to have stranded costs, you just want that to be fair.

One of you mentioned stranded costs. Was it you, Mr. Fleming?
Mr. FLEMING. Yes, I did.

Mr. HALL. But you are around the fact to where you believe that stranded costs have to be a part of any bill that we have?

Mr. FLEMING. Yes, sir, I do. I would just simply say that it should be done by way of a third party determination as opposed to unilaterally being decided by TVA or anyone else.

Mr. BARTON. Yeah, However they do it, fairness is fairness. And I think that is what we seek here.

Mr. Larson, what is wrong with what Mr. Baker has proposed? Just generally, if you can for the record.

Mr. LARSON. As I understand it, Mr. Baker has proposed lowering the fence both ways so that his members and their customers can benefit from retail deregulation. And we agree that his customers should benefit from deregulation. The question is whether or not as a part of that the fence comes down to permit TVA to sell—seek load, sell capacity and energy outside the Valley in Birmingham, Alabama or elsewhere. We believe that if TVA does that or is authorized to do that, then it is competing against investor-owned utilities and others, power marketers, and should engage them on a fair basis, level playing field.

Mr. HALL. What give and take agreement do you envision that could put aside that problem?

Mr. LARSON. I think we are actually very close.

Mr. HALL. Well, that is good news.

Mr. LARSON. Really if you are assuming the fence goes down both ways, what is missing from the TVPPA's platform, if you will, is having damages apply under antitrust laws, for example. They propose that antitrust laws apply but only with injunctions. Well, antitrust laws are extremely expensive to prosecute, very lengthy. And if someone made the investment to pay lawyers all that money to get an injunction against TVA, while the only remedy is prospec-

tive relief, well by then the harm is done. So we believe that there should be a deterrent mechanism and treble damages.

Now TVA raises the fact that well local governments are immune from damages. We say well that is because local governments serve only their constituents and there is an internal democracy function there that would prevent municipalities from raping and pillaging its customers, but if TVA is selling in the market in general, it is not serving its constituents.

Mr. HALL. We need additional market power provisions, is that your opinion?

Mr. LARSON. I believe that is true, yes, for TVA.

Mr. HALL. Mr. Baker, what is wrong with what Mr. Larson has said. I noticed, Mr. Larson, a lot of people winced behind you a time or so when you mentioned triple damages.

Mr. BAKER. The basis for antitrust damages is against a corporation that has stockholders and is out to make a profit. TVA does not have that. Any damages that would be assessed against TVA would automatically transfer directly to the ratepayers of the Valley. There are no stockholders to absorb triple damages or whatever damages comes out of antitrust action. That is the reason we have settled on the issue of TVA could be stopped from antitrust actions under it, because they have little or no incentive to engage in an antitrust entity anyway, since they are not a profit-making entity. So that is the reason we have settled on the fact that if they are guilty or do cross the line into an antitrust situation, they should be stopped, we would hate to see our ratepayers penalized for that.

Mr. HALL. Mr. Larson.

Mr. LARSON. If I might, TVA's ratepayers would not have to pay. The investors in TVA would have to pay. Just like the investors in shareholder-owned utilities have to pay. That would be the investors that buy TVA's bonds. Also, with regard to the motive to commit an antitrust violation, the United States Supreme Court in Louisiana Power and Light versus city of Lafayette recognized that governmental entities indeed can have the intent to suppress competition and I would observe in general that the profit motive is surpassed in its intensity by the survival instinct.

Mr. BAKER. Congressman Hall, I would not get into a debate because I am in water over my head probably on the legal issues, but I know of no way and Mr. Medford confirms that, that any antitrust damages could be transferred to the bondholders of TVA bonds. They hold a bond on it that draws interest and that is it. And I know of no way that that could be transferred. I think everything that we have looked at at the TVPPA level is that the ratepayers would have to pick up that cost.

Mr. HALL. Mr. Medford.

Mr. MEDFORD. I agree with that.

Mr. HALL. Mr. Medford, in your testimony on page 6, you state there is overwhelming support for TVA to continue to maintain its role as a low-cost, integrated electric supplier for the Valley. But here today, you have two of your biggest customers, Knoxville and Memphis, who have some major concerns with your future role as a power supplier in the Valley.

What is your view of their concerns and what is the likelihood that you are going to be able to reach an agreement to bring to these members from Tennessee who will bring it to the chairman here, to take it to the rest of the subcommittee, the committee and the Congress?

Mr. MEDFORD. Well, first of all, Congressman, I will point out we are in substantial agreement on many of the deregulation issues with all of our customers including Memphis and Knoxville. Yes, there are some specific issues that we have discussed with those two customers and not resolved their concerns. I will point out to you though that both of those large customers have indicated to me they do not visualize a scenario in which they are not taking power from TVA. They want more flexibility under their contracts, they would like shorter notices and they would like at least the ability to take partial requirements. But both of them have indicated an intention to be customers of TVA into the indefinite future.

Mr. HALL. You are making some headway, because I think you all would really like to be out from under your sole-source contract and you talked about a 10-year option; you want one, maybe two, and they suggested three. That looks like a major compromise and effort to compromise there. Are you that close together on most of the other issues that you are going to ask these Members of Congress to support you on?

Mr. MEDFORD. Congressman Hall, that is a hard one to answer.

Mr. HALL. Well, it is a necessary one if you want a business bill rather than a political bill, because Congress can give you a political bill that you probably will not like, my State may not like it. But our goal I think is to get a business bill that you can live with because you have to be our partners and make it work after we write this bill. Otherwise, we are going to be in the terrible position—and none of us here, nobody in Congress wants to be in a position if they are among those 10 States that produce energy and the 40 who use it, we do not want to be among those that have low rates and raise ours where they can lower them up there in New Jersey and New York and other places north of the line. If you know what I mean.

Mr. MEDFORD. I know what you mean. Given the complexities of deregulation, I think we are amazingly close to our customers.

Mr. HALL. I hope so because you have good members representing you that are in really a tough, tough situation. And it is through their imploring to the chairman to come here and listen to you that we are here. And what I hear is some major differences still, but I see some efforts to work it out. I hope you can.

Mr. Chairman, I yield back my time.

Mr. BARTON. Thank you. Mr. Bryant for 10 minutes.

Mr. BRYANT. Thank you, Mr. Chairman. Let me just begin this by saying again thank you for this very qualified and competent panel. And I think we have got a fairly large audience of people here today, and I know all of you have an interest in this issue one way or the other, or you would not be here.

But I think you can tell from the testimony that we have had presented and certainly by the line of questioning that we have had thus far that this is a very complex issue. There are lots of things we do not see eye-to-eye on right now, and particularly those of us

that represent areas of the TVA Valley, what we call the TVA Caucus in Washington, those members are in a position where we are trying to bring together something in the nature of a consensus among those in the Valley, and then we can go out and compete against those outside the Valley with our ideas on how this restructuring should look. But again, from what we can tell so far today and what we knew before we got into this, there are still differences within the Valley.

But let me say to those in the audience too, I think there are some things that I would like you to take away from this hearing at a minimum, and those are a couple of things that we agree on. I think we all agree here that competition is coming, we already know it is coming at the retail level throughout a number of States and that with it coming, we cannot any longer remain an island out there among the competitive waters. And we see members, purchasers of large chunks of power sitting before us today, who not only see competition coming, but they want to be a part of that competition. TVA sees that inevitability of this issue. It may not be this year, may not be next year, we do not know when it will be. Certainly this process is beginning to move though, as our chairman has indicated.

So, competition is coming, and I think that is one thing we agree on. We have to get out and be a part of that—status quo is not going to work.

And the second thing I would like us to take away from this is that if it is coming, if it is inevitable, then we in the Valley and those of us that represent those in the Valley have to be at the table, have to be a part of this process of helping to design what this bill will look like, what TVA will look like when this is all said and done.

And those are two very important factors that we have to come to grips with, and that is certainly one of the reasons I wanted to have a hearing here in Nashville, so that we could air some of these views, because, as I have said before, we have been very spoiled in this area. We have good low rates, and we have very reliable power, and TVA stands ready and willing to continue that, even in a competitive environment. But we have got, I think, to begin to come together within the Valley because we have got a very big fight ahead of us outside the Valley. Mr. Larson is here, he is a good man, there is nothing wrong with him, he represents some good people. They have a different view on things and that is just an example of what we are up against, not only with groups like the one he represents but others, particularly in the northeast and areas that, as Mr. Hall said, they have higher power rates than we do right now. And somehow, that is going to come into play, I know in the end it will come into play.

So I, like Mr. Hall and Chairman Barton, encourage us all to get together within the Valley and try to work out some of these differences.

Mr. Fleming, I know from the standpoint of Knoxville—and I have talked in detail with Memphis and those positions mirror each other—can you pay stranded costs and still, in some instances, you think, for your customers, beat the TVA price on electricity?

Mr. FLEMING. Congressman, obviously a very difficult question to answer, but essentially what we want, Memphis and Knoxville, is a day in court in order to determine what stranded costs are. And we think that competition generally is good. We will certainly have to weigh the facts and the circumstances at that point in time to decide whether or not we are going to leave TVA in any substantive way at all. Mr. Medford, I think is correct, it is hard for us to envision not having a successful and strong TVA which we will be able to buy at least a portion of our power from.

Mr. BRYANT. Mr. Baker, I know you represent a number of the co-ops and distributors. How are our rural customers going to fare in a new world of competition? Are there going to be people out there that are not going to be able to get power because they are at the end of the line? Are there going to be people out there that are not going to be able to afford power because it may be more than what they are paying? Is that what a deregulated world is going to bring to the rural customers?

Mr. BAKER. I doubt that no one will be able to get power, I have serious problems, and that is one of the things that we have wrestled with in TVPPA, how to deregulate the electric utility industry, which in effect now is a postage stamp rate across the country, basically it is a cost of service rate that has been used for years in determining electric rates, either here in the Valley or outside the Valley. What does it cost to serve customers.

In a market-oriented rate, that is not necessarily what it amounts to as much. And if you get on an airplane you figure that out real quick, that the plane flies you from here to there and somebody beside you may have an entirely different ticket than you do. That is one of the real concerns that we have and we think that is the reason in this area especially where we do have very reliable power and very competitive electric rates, we have to be extremely careful in the deregulation process. There are parts of the country that have got nothing to lose. I mean when you are paying 14-16 cents a kilowatt hour for electricity at the residential rate, as some areas are, it is like Jerry Clower said, "shoot up here among us, one of us has got to have some relief."

Mr. BRYANT. What, for example, do you pay here in Tennessee per hour, compared to 14 cents?

Mr. BAKER. Between 5 and 6, depending on where—

Mr. BRYANT. Mr. Medford—Mr. Baker, let me jump over to Mr. Medford, my time is running out.

I think one of the things that we have to come to deal with here in Washington as we deal with TVA is to try to determine what is TVA and what will TVA look like in a deregulated, restructured environment. And I think Mr. Larson points out some of these things where there are differences.

I know one of our charters to TVA is that you sell your power to the Valley at the lowest possible rate. Now the people that he represents and other private sector power companies in the northeast do not have that requirement to sell at the lowest possible rate. They are out there to make a buck, make a profit, although there is nothing wrong with that.

And when we start talking about trying to level the playing field between those apples and oranges, that is where it becomes rather

difficult. He talks about the government subsidies that TVA receives, but yet we know that in other instances where there are private power companies involved, that they do not have to pay money out of their own profits to take care of the waters, the flood control, the navigable waters, the economic development in all cases that TVA has to now pay because Congress is not paying that non-power subsidy it used to pay.

And we know that when they talk about the fact that they pay taxes andd TVA does not, but TVA makes payments in lieu of taxes. So, while we can make claims against each other and I do not know where we get in the end, you are very different than the people that Mr. Larson represents or some of the northeastern power companies, but yet we are going to try to put you in one mixture and say you are going to compete together against each other and that is just one of the problems I see that we have to deal with here.

Do you have any response to any of those statements?

Mr. MEDFORD. First, Congressman Bryant, I agree with all of what you just said. One observation, the folks that talk about leveling the playing field always want to work on the perceived advantages that the other person has, when in fact, private power—and I spent 14 years of my life working for a large private power company—enjoys certain advantages that TVA does not; TVA and public power entities, yes, we enjoy some benefits that private power does not. The two are different.

I mentioned in my opening statement this country has benefited from a diversity of suppliers, about 25 percent of the electricity sold in this country today is sold by public and cooperatively owned power companies. I think that has worked well for us, I think it will work well for us going into deregulation. Beyond that I cannot comment.

Mr. BRYANT. In terms of the issue of reliability, particularly Mr. Baker, Mr. Fleming or Mr. Anderson who generally are the customers, do any of you foresee problems in a deregulated world with reliability? In other words, every time we are used to turning that power switch on and the lights coming on, they come on. Is this going to work? Mr. Baker?

Mr. BAKER. Well, all we can go on is the little bit of experience that we have had. And last year in the midwest there were considerable problems in suppliers who had contracted for power supply who failed to deliver it. You know, you are dealing with an industry that has zero elasticity between supply and demand. If an airline overbooks, they put you on the next flight. If we overbook, somebody's lights goes out. I mean that is just the way it is. There is no elasticity between supply and demand. So it will be a very tricky arrangement to go to a deregulated industry and still enjoy the benefits that we have had on franchised system arrangements because there is a lot that goes into making those lights come on when you flip the switch.

Mr. ANDERSON. I guess we have a slightly different view in that we do not believe that the reliability is going to suffer. The generation component will be there, there will be much more incentive for additional generation to be installed. As far as flipping on the switch, the real problems would be in the transmission or distribu-

tion and those areas are not going to change from the way that they are today. So we think that the overall reliability is going to stay the same.

One area that may actually improve, we keep hearing that you cannot store electricity, which you cannot, but in the future you may have people putting in combustion turbines in areas where they have gas storage. So in effect gas can become the storage commodity for electricity and in the future I think it is going to be an improved reliability.

Mr. FLEMING. Congressman, Memphis and Knoxville believe similarly to Mr. Anderson, that actually reliability will not be an issue. We are obviously concerned about that, we think appropriate safeguards ought to be taken, but in terms of having any substantial problem, we do not believe that will be the case.

Mr. BARTON. Before we recognize Mr. Whitfield, I assume that TVA does have some interruptible contracts.

Mr. MEDFORD. Yes, we do.

Mr. BARTON. So there are occasions that—it may be a big industrial user like Mr. Anderson that if you have got a peak demand in the summer, you would keep your residential customers happy, but there would be an interruptible contract that your commercial customer might curtail for a period of time. That is how we do it in Texas and I assume that information has spread its way east to Tennessee.

Mr. FLEMING. We have similar arrangements here.

Mr. BARTON. Mr. Whitfield for 10 minutes.

Mr. WHITFIELD. Thank you, Mr. Chairman.

I think all of us have heard today an admonition that it would be beneficial if all the groups would sit down and work it out. And we have heard testimony this morning that would indicate that people are not too far apart on a lot of different issues. But I think all of us recognize that even though you may not be far apart, if you really do not want to do something, you can think of reasons why you should not do it. And if you really want to do something, you can think of reasons why you should do it.

As a Member of Congress, I have attended a lot of annual meetings of co-ops in my district. I do not get any sense that anybody is really enthusiastic about deregulation, at least in my district. As a result, I have not been out in the forefront pushing this issue. I also know that some people are being pulled in because they feel like they really have no choice.

But Mr. Medford, speaking for yourself personally or if you have the right to speak for TVA, do you prefer to support deregulation now if you could obtain those things that you have indicated you would like to have in the bill?

Mr. MEDFORD. Congressman Whitfield, I am not sure I am smart enough to know when is just the right time for deregulation in this country. I personally have some concerns. I think deregulation—Congressman Bryant mentioned that he believes deregulation is inevitable, I agree with that, I think that it is.

However, I think there are some things well beyond the Tennessee Valley that we have not figured out in this country how to deal with and one of them is what to do with the transmission system. We all agree that there needs to be—that the transmission

system needs to be available to all, available to all on an equal basis, but we have not yet figured out how to regulate it, how to manage it in a way that would provide that availability and at the same time maintain the kind of reliability that we have historically seen in this country.

I acknowledge I am ducking your question, I am going to tell you I prefer to focus my thoughts on what should Federal legislation look like when it comes, as opposed to being the one to designate the appropriate time for it to come.

Mr. WHITFIELD. Mr. Baker, what about you?

Mr. BAKER. I suppose I share Mark's sentiments to a great extent on that. I think it is something that in this area especially the economics of the situation need to be studied very carefully. We have a reliable power supply and a very competitive power supply. We are not under the gun, if you will, to do something in this particular area.

We think that essentially deregulation will happen. The speed will be probably paced by Congress and the economic conditions of the country that allow that to happen under it. You will have to determine that speed as much as anyone under it. But we would urge extreme caution, speaking from the Tennessee Valley area under it because of the fact that we do enjoy reliable power at a competitive price at the present time.

Mr. BARTON. Will the gentleman yield?

Mr. WHITFIELD. Sure.

Mr. BARTON. But all your testimony is that you want some changes and the reason that you are here to be able to get some changes is because all these scalawags around the country have been pressing for competition and we have got about half the States that are open. I know we have got great leadership in TVA but my guess is if there were not all these competitive forces out in the country, our good friends at TVA would not be quite as amenable to some of these changes that you all have put on the table. Would you not agree with that?

Mr. BAKER. Yes, I would. Competition is something that neither TVA nor the distributors in the Valley should attempt to duck or whatever. When that becomes something that can be introduced in the Valley under it, we should be able to meet it. We have no economic right to life if we cannot meet the competition.

Mr. BARTON. You just want to be treated, as you all have repeatedly said, fairly and do not want them, if I could coin a phrase, damn yankees coming down and getting another advantage of you. Is that not kind of a fair way to say it?

Mr. BAKER. That is pretty good. To my grandfather, they were all one word.

You are right, we quit raising cotton when we found out they were easier to pick.

Mr. WHITFIELD. Mr. Fleming, in your testimony, I think you indicated that there had to be changes at TVA regardless of what happened, and I guess I did not come up with a conclusion whether or not you would prefer changes at TVA as a priority or deregulation as a priority.

Mr. FLEMING. Let me I guess clarify that issue for you. This is probably the issue that probably separates us, Memphis and Knox-

ville, from the rest of the distributor ranks. We believe that competition is good for our customers, we think it should be introduced as quickly as possible. We believe that the introduction of competition will make a strong TVA even better. We believe that is healthy for our customers and choice is good.

Mr. WHITFIELD. So you think a good deregulation bill would end up benefiting your customers.

Mr. FLEMING. Absolutely.

Mr. WHITFIELD. Okay. And then Mr. Anderson, you support deregulation as well, correct?

Mr. ANDERSON. Very definitely, it is one of the top priorities for General Motors. The TVIC Industrial Group has been working on it for some time. All of our companies—most of our companies have locations outside of TVA territory as well as inside and we do not believe, from our experience, that TVA prices currently are quite as competitive as what TVA believes they are.

Mr. WHITFIELD. Mr. Larson, you had mentioned that you had filed three lawsuits against TVA. Could you briefly just touch on what those were, and what the issue was?

Mr. LARSON. Sure. Two of those related to the so-called exchange power exception. Under the TVA Act, we have the fence and the fence says TVA is not authorized to supply power outside of the area where it and its distributors for the primary source of power supply were on July 1, 1957. But there is an exception to that, it says TVA may engage in exchange power arrangements with neighboring utilities. That is an authorization that gives TVA a lot of flexibility in times of surplus to get outside of the fence, but it does so in a cooperative fashion, not a competitive fashion, by mutually engaging in coordination with neighbors. That is why we support the fence staying up, we believe that it provides sufficient flexibility for TVA even if there is some attrition of load.

Two of those TVA lawsuits related to the contours of that exemption and addressed the issue of whether or not a utility who is allowed to receive power from TVA, members of TVA Watch included, are allowed to then sort of resell the rights to that power to a distant market, and not take delivery of that power themselves, just have TVA ship it off to the customer. We were victorious in the first litigation by a judgment of the court in Alabama Power Company versus TVA and then in the next litigation there was a settlement and TVA agreed to adopt principles where it would agree to limit its sale of power to neighboring utilities only to the authorized companies and only if those companies take it on for resale within their statutory franchised area.

The third lawsuit related to more of a States right question. TVA and one of its distributors entered into a three-way transaction where TVA supplied power to the distributor, the distributor resold the power to a customer who took delivery of that power inside the fence but because it was a coal mining company, had a lot of land and it had built its own transmission facilities and was using that power in an area, in a very substantial area that was within the service territory of Old Dominion Power Company, which is a unit of Kentucky Utilities. The question there was whether or not that transaction was lawful or not, and the Virginia Corporation Commission ruled that the TVA Act does not preempt State law with

regard to service territories and therefore, Virginia law in that case applied and made the transaction unlawful.

Mr. WHITFIELD. Okay, thank you.

Now on the regulation of wholesale rates, and Mr. Medford supports FERC having that responsibility and Mr. Baker, you all are asking for an arbitration panel to make those kinds of decisions; do you all feel like you are very close on being able to come to some agreement on that?

Mr. MEDFORD. Congressman Whitfield, let me comment. We support FERC regulation of transmission rates, we do not support FERC regulation of power rates.

Mr. WHITFIELD. Okay.

Mr. MEDFORD. For the reason that the TVA Board, as has been mentioned earlier, is charged with responsibility of providing electricity at the lowest possible cost within the Valley. We do not think it is appropriate to impose on TVA a second set of Presidentially appointed directors who are responsible for establishing rates, perhaps with a different mission. FERC—the FERC charge, to my knowledge, does not contain anything about providing power at the lowest possible rates. We think that it is appropriate for the TVA Board to continue with the responsibility for establishing the price of electricity within the Valley.

Mr. BARTON. Would the gentleman yield?

Mr. WHITFIELD. Yes.

Mr. BARTON. Do you have any children, Mr. Medford?

Mr. MEDFORD. Yes, I do.

Mr. BARTON. Are any of them daughters?

Mr. MEDFORD. Yes, one of them is.

Mr. BARTON. Have they ever gone out to buy a dress—

Mr. MEDFORD. Yes, she has.

Mr. BARTON [continuing]. And come back and you said is that the lowest possible price you could buy that dress for? And they said yes, dad, it is; but you know in your heart that if you had went with her, you might could have gotten that less a little bit less expensively?

Mr. MEDFORD. With all due respect, Mr. Chairman, my daughter is not a Presidential appointee.

Mr. BARTON. I guess it is possible that Tennessee is just the State of statesmen and everything is always done totally altruistically, but in Texas we have had a lot of Presidential appointees and gubernatorial appointees that did the best they could, but we have always had the State public utility commission looking over their shoulder to make sure that what they thought was the best really was the best. So, you know, I understand what you are saying, but in the Bonneville Power Administration, they too have the same charter but their rates are reviewed by the Federal Energy Regulatory Commission.

I am not casting any aspersions on the good people that have been appointed by the President on the TVA Board, but it may be that we want to give you a little additional oversight to just make sure you stay as altruistic as you have for the last 60 years.

Mr. WHITFIELD. Mr. Chairman, my time has expired but if Mr. Baker would like to make a brief comment on just how important he views this arbitration panel as a recommendation.

Mr. BAKER. Well, we feel that, summing up, that trust everybody but cut the cards. And without real aspersions toward TVA, we just feel that a competitive industry—going back quickly, TVA and the distributors have had a hand-in-glove relationship for 60 years, probably more so than anywhere else in the country. It has been a good relationship and we both evidently liked it because that is where we were for 60 years. We are in the process of taking the hand out of the glove a little bit at this time. Essentially, we feel like that in a competitive industry, whether it either is real or perceived, we think we need the ability to have a third party review TVA's wholesale rate proceedings. They may come to the same conclusion that TVA had, that this is the rate, this is the way it ought to be. It would make us feel better if a third party reviewed it.

Mr. BARTON. Mr. Whitfield, do you have any other questions?

Mr. WHITFIELD. No.

Mr. BARTON. Mr. Pickering for 10 minutes.

Mr. PICKERING. Mr. Medford, just to follow up on the last question by Mr. Bryant. That seems very reasonable, why would arbitration or third party resolution not work from TVA's perspective?

Mr. MEDFORD. I will not say it will not work, or that it cannot work. We are not convinced it adds any value to the process. There are varying titles by which this activity we are talking about here today goes, some would call it restructuring, which I am coming to believe is probably the more accurate. A lot of us would prefer to think of it as deregulation. We would like to see deregulation for TVA not mean more regulation.

Mr. BARTON. Would the gentleman yield, just real quickly?

Mr. PICKERING. Yes, please.

Mr. BARTON. Assume that we are going to subject TVA to some oversight for rates. You do not have to agree with that assumption but for debating. Do you want it to be third party arbitration like Mr. Baker recommends, FERC like Mr. Fleming recommends, or something that nobody has yet recommended but I think might work would be State PUCs? If you did not have the option of no oversight for rate regulation or rate review, I should say, which of those three is least objectionable?

Mr. MEDFORD. Let me give two answers. TVA's answer would be none of the above.

Mr. BARTON. I understand that.

Mr. MEDFORD. I will give my answer, and I have had some experience. As I mentioned I used to work for a private utility and I dealt with the California Public Utility Commission and with FERC. My choice would be FERC regulation.

Mr. BARTON. FERC, Okay.

Mr. PICKERING. Thank you, Mr. Chairman. Let me step back just a second and put where we are—

Mr. BARTON. I think Mr. Hall wanted to say something.

Mr. PICKERING. Oh, excuse me. Mr. Hall.

Mr. HALL. If you would yield for just a moment on that.

Mr. PICKERING. I will be glad to yield.

Mr. HALL. On any type tribunal or group that would get together and negotiate the amount of the stranded costs or the terms of the stranded costs, would that include a final decision by that board

that would be appealable to the courts by either side that was not interested in it, did not like the outcome?

Mr. MEDFORD. Congressman Hall, I am not expert on the law, but my belief is that FERC decisions—most of us have agreed on the issue of stranded costs that the appropriate tribunal would be FERC—are appealable in Federal court.

Mr. HALL. Yes. Well, I do not agree with you that FERC ought to be the final analysis or final determiner there, but—or anything else at the Federal level, but I think if I were you, other than Mr. Anderson, I would be a little like the old country store keeper on this issue. He said he ignored the impossible and cooperated with the inevitable. And that is what you are doing, you all are for deregulation if your provisions are put in it. That is a good statement, is it not?

Mr. MEDFORD. Yes, sir.

Mr. HALL. And I think you have to be parochial there because you represent the people you represent. And your goal is your goal and you are called upon to carry it out. So I understand that. And Mr. Larson, do you agree with his—I will get my time back, I will let Mr. Pickering go ahead.

Mr. PICKERING. Mr. Hall, I do not mind yielding to the distinguished gentleman from Texas.

Mr. HALL. No, I am all right.

Mr. BARTON. We are just going to restart your clock. You basically got no question asked before you were interrupted.

Mr. PICKERING. Let me step back just a second to say where we are in this process and the substance of it.

As you who have followed the debate know, when this was originally proposed in the House, most of the proposals focused on a date certain mandate at the Federal level. Well that now has been removed, Chairman Bliley has said with 23 States moving, that is no longer necessary, so the Federal mandate has been removed. And so that leaves us with getting—it is a little bit more than this, but for our focus today, three things right—reliability, and there are pretty basic consensus on the reliability provisions, there are a few things that may need to be modified but from a fundamental perspective, reliability has been addressed in a way that has the public power, the co-ops, the registered and investor-owned utilities, the manufacturers, everyone in basic agreement on the reliability provisions at which we are looking in the administration bill and the other bills that have been introduced in Congress.

So the question before us, can we get the transmission elements right, and how to either establish or provide incentives to get the transmission organizations correct.

And the third thing would be to get the public power provision title, TVA title, correct.

So let me ask a couple of questions that would hopefully address that third element that has some overlap in the second and third. Mr. Barton had asked Mr. Larson earlier, and let me follow up on his question to Mr. Medford concerning your bonding authority and who is ultimately responsible if there is default, would it be the U.S. taxpayer. If you were to take down the fence and allow TVA to sell wholesale, any generation investment that you would engage in to accomplish that, would you support explicitly saying that the

U.S. taxpayer has no liability with any such bonding authority to finance that generation capability?

Mr. MEDFORD. Any generation that we would contemplate would be for the purpose of serving the people of the Valley, let me first say that. As I mentioned earlier, Congressman Pickering, the debt that we issue today carries the explicit statement that it is not backed by the full faith and credit of the Federal Government.

Mr. PICKERING. So if we put something explicit in there, you would have no problem with that.

Mr. MEDFORD. That is correct.

Mr. PICKERING. Okay, that would only be reaffirming what you believe is the status quo.

Mr. MEDFORD. That is correct.

Mr. PICKERING. A follow up question again getting to basic agreement. And I realize—awhile ago my first question was would you support a dispute resolution process or mediation or arbitration. You had said that we do not want to see re-regulation versus deregulation. Our dilemma is, Mr. Anderson, I imagine that you do not deal with any 10-year contracts on your power supply, is that correct?

Mr. ANDERSON. None—well, I should not say none. We have in the past had some. In TVA, the contracts that we have are 10-year contracts I believe with 1-year termination.

Mr. PICKERING. But in a competitive world, you would look on a very short-term whatever is the lowest cost power from whatever source that you could obtain it, is that correct?

Mr. ANDERSON. Normally a 2 to 3 year would be as long as we would ever want to entertain.

Mr. PICKERING. And the dilemma is as we try to go from a non-open to a competitive process for the distributors, that they have that same ability to move as the market moves. And so I would hope that we could reach some type of resolution on that issue as to arbitration or some type of process on the contract so the distributors do have the ability and the flexibility to move as the market moves.

Let me—there was a discussion on what limitations, if any, should apply to TVA on the generation. You had talked in the proposals now before Congress, there are already several. One, it would be restricted only to wholesale, it would not include retail. Two, it would only be excess power that would not be used in the Valley. Are there any other limitations? For example, Mr. Larson gave an example of a TVA generating facility going into Houston, Texas, outside of the Valley to compete with Enron. Would you support a geographic limitation that any generation facility would be within the Valley?

Mr. MEDFORD. I see no problem with that.

Mr. PICKERING. So that the example Mr. Larson used would never occur?

Mr. MEDFORD. That is correct.

Mr. PICKERING. Would there be any other limitation that could address Mr. Larson's concerns about TVA being a national competitor with, in their view, these unfair advantages or subsidies? If you do use any of your generation facility to sell wholesale outside

of the Valley, should that fall under different rules than your other lines of operation?

Mr. MEDFORD. I do not see any advantage to be gained from that. I think the two restrictions on sales that I mentioned and the one restriction on physical location and generation that you mentioned provide a more than adequate response to Mr. Larson's concerns.

Mr. BARTON. Will the gentleman yield?

Mr. PICKERING. Yes.

Mr. BARTON. What about restrictions on the selling of existing generation capacity? Should TVA be restricted to selling existing generating plant to anybody, or should they be able, if the Governors wanted to, to sell to Enron or Southern Company an existing plant within the Valley?

Mr. MEDFORD. I guess Mr. Chairman, I do not see any huge advantage to be gained from such restriction. I will first say to my knowledge we do not currently contemplate selling any existing generation.

Let me pose a hypothetical in response. Let us assume—reference was made earlier to incomplete nuclear capacity. The biggest part of the investment in that is the Bellefonte plant. Let us assume an entity, a private entity, concluded that they could derive more economic benefit from that facility than TVA could and could afford to complete Bellefonte as a nuclear unit or in some other form, and that it was economically beneficial to TVA to sell them that capacity; I would hate to see a restriction in place that foreclosed that.

Mr. PICKERING. Mr. Medford, TVA has a 10-year debt plan. What would your 10-year plan be if we take down the fence to allow TVA to sell wholesale, what percentage—as you look at demographic, as you look at growth, as you look at your projections of what you currently have as far as your generating capacity versus your proposed generation investment, 5, 10 years from now what do you see if we take the fence down of TVA selling wholesale outside of the Valley. What would your ratio of in-Valley versus outside of the Valley be?

Mr. MEDFORD. My challenge in answering that is that there are so many unknowns. You have given me a few facts. We have not done planning for specific scenarios of one gets this specific Federal legislation in this specific year with these specific provisions. You would have to know that to be able to answer that question.

Clearly I mentioned a very conservative estimate based on the current environment continuing is that by 2004 we would need 3000 more megawatts. And I will say that is very conservative, it could be substantially more than that.

Mr. PICKERING. To meet the Valley demand.

Mr. MEDFORD. The Valley demand. If deregulation were to go into play, I think it is quite conceivable that we would lose some of our existing load, but without knowing what that legislation looks like, it is very difficult to say here exactly how much of the Valley load we should plan for. I have a hard time answering your question.

Mr. PICKERING. Well, I guess my question is this, if you were to plan for a world where the fence is down, would you be in a defensive or a proactive position of meeting your competitive challenges?

Would you be hoping to respond to the possible wholesale competition coming into the Valley and displacing some of your current load that you now supply or would you be wanting to market outside to offset any loss as well?

Mr. MEDFORD. We would see our primary mission as serving the Valley. We would not be building new generation for sales outside the Valley. Yes, if we were to lose a substantial portion of our load within the Valley, for a variety of reasons, including mitigating stranded costs, we would want to be able to market that power outside the Valley.

Mr. PICKERING. Mr. Chairman, if I could just 2 more minutes. And again, I ask these questions not with opposition to TVA being able to invest in new generation. As a matter of fact, I think it advances the objectives we have here, the more generation we have in a competitive place, in a competitive market, hopefully the lower the cost and the greater the benefit to the distributors, to the members, to the consumers. And so we just need to find a way that it is done fairly so that there are not competitive advantages or disadvantages, but I think more generation, whether it is in the Valley or outside of the Valley is a positive thing for everyone.

Let me close just with one question. In 1991 and 1992 when the Energy Act was passed, if I remember correctly, TVA and the distributors supported keeping the fence up and supported not going into wholesale competition; is that correct?

Mr. MEDFORD. I was not involved—I was with TVA at that time, I was not involved in those discussions. I can answer for TVA, TVA strongly supported that position.

Mr. PICKERING. Now in 1999, looking back on that, would you say that was a mistake?

Mr. MEDFORD. I do not think that was a mistake, I think the provisions of the 1992 Energy Policy Act that addressed TVA, I think were appropriate then, I do not look at them as any kind of mistake.

Mr. PICKERING. But now you are in a situation where you want to get into wholesale, so would it not have been better to have had some type of permissive flexibility?

Mr. MEDFORD. One of the issues that we raised at that time is if you look at the typical private entity, very often 95 percent of their sales are at retail and 5 percent of their sales are at wholesale. TVA is the reverse of that; on the order of 85 percent of our sales are at wholesale and 15 percent at retail. What we pointed out at the time is that there is not that active a wholesale market outside the fence for us to compete with. We see that to bring down the fence and remove the anti-cherry-picking amendment, that should be done at the same time that there is retail—Federal retail competition legislation, which will lead to a much more active wholesale market.

Mr. PICKERING. So you are saying in this context it is the right thing to do and in that context it was not.

Mr. MEDFORD. That is correct.

Mr. PICKERING. Okay. Thank you very much, Mr. Chairman.

Mr. BARTON. The gentleman from Texas wish—

Mr. HALL. Mr. Chairman, I have a unanimous consent request that Congressman Clement, who is not a member of this sub-

committee and all of the other members of the subcommittee have a right to submit questions—have 2 weeks to submit questions and ask for a reasonable time so that they may be answered.

Mr. BARTON. Would you amend that to 1 week?

Mr. HALL. No—yes, sir, since you are chairman.

That was what I really wanted to start with.

Mr. BARTON. Amend it to 1 week and there will be no objection.

Mr. HALL. I so amend it.

Mr. BARTON. Does Mr. Whitfield or Mr. Bryant have one question that they are just burning to ask before we conclude?

Mr. BRYANT. I would like to make a comment if I could.

As I sat here and—and I have sat in hearings like this in Washington and heard much similar testimony before, and sat in numbers of meetings that not only the chairman of this committee has set up, but the full committee has set up, in talking about this very important issue; and so many times I just keep circling around and coming back to the same issues. We have got an entity here, TVA, that has represented this district well, this region well, over the years. But yet within the Valley, we have got customers of the TVA who want choice, which those are not unreasonable issues here. Competition is coming, competition should bring low prices, reliability, new technology, innovation, things that competition always brings, and it is coming all around us. And as I said earlier, we cannot remain in a status quo, we cannot for the long term be an island. I think it is inevitable, although it may not be inevitable this year. Politically, you have got the Senate and you have got the House and you have got the President and all these things, but from a competitive market force, it is.

But I want to urge my colleagues, and particularly those in the TVA Caucus and the delegation, that oftentimes I can recall trying cases and picking a jury and it was a process like this, where we had rounds of picking jurors and people would be challenged off of that and you thought it was going along very well and then, when that last round occurred and you sat back and looked at the final panel of 12, you wondered what in the world happened, this is terrible. And you wanted to get sick at that point.

But I want to urge us not to allow this to happen here, because I see that as a possibility. There are those out there—and Mr. Larson, I do not believe is one of those, but there are people out there that would like to see the TVA stay within the fence in an ideal world for them but they be allowed to come in there and sell to people like Mr. Anderson and Mr. Fleming and Mr. Baker, and they would like to see TVA stretched out sort of on a line and hung out to dry with no ability to build new facilities to produce new generation, even though the Valley is growing dynamically. And just look at this past summer and how we had power basically in our homes, sustained throughout even though we had record-setting demand—TVA met that burden.

And again, as we go through this, I appreciate everything that is being said here, but we are talking about apples and oranges. And to try to get an equal playing field and to try to hamstring TVA in the interest of a so-called level playing field when you are talking about apples and oranges, I do not know how we get there, I really do not, and I have struggled with this, and I know every-

body on this panel has struggled with this, and I just again appreciate the courtesy and the leniency and the sympathies that this Chairman and ranking member and others have given us all in this area as we struggle through this process of what is TVA going to look like, all in the interest ultimately of your customers and our constituents.

And I thank the chairman.

Mr. BARTON. Thank you, Congressman.

I want to thank the panel for your testimony. I want to thank the great State of Tennessee for allowing us into the hearing room here in the State Capitol, and the Speaker, Mr. Naifeh, for his courtesy.

I want to let the witnesses and the audience know that this is not just another hearing. I am going to sit down with the members that are here today and others that are not. The current draft that is out for discussion has no TVA title, the next draft, it is my intention to put it out late this week, it will have a TVA title, and a lot of what has been said here, we are going to try to assimilate into that title.

It is my goal at the request and the suggestion of Congressman Bliley, the full committee chairman, to try to put together a bipartisan consensus draft within the next 2 weeks, schedule a legislative hearing on it if not next week, the week after, move to markup and report the bill to full committee sometime no later than mid-October.

So I know that you all have been talking about this for a long time and as Congressman Bryant has pointed out, Congress is a complex situation, we have got to go subcommittee, full committee, floor and you have got to go subcommittee, full committee, floor in the Senate and you have got to go to the conference between the House and the Senate and then you have got to have the President sign off on it. So there is absolutely no guarantee that we are going to move a Federal bill this year or early next year, but it is my intention to move a bill and I am going to exercise every bit of influence that I have to move a comprehensive bill on a bipartisan fashion that is fair. And I cannot see a way to move a bill if there is not a TVA section. TVA is too big, it is too dynamic a region, there are too many Congressmen and Senators that are influential, including the majority leader in the Senate, Senator Lott. So it is absolutely incumbent that if you can get together, you get together, and you do it sooner rather than later.

I heard the same testimony that everybody else did and I read the testimony last evening, and I do not see anything irreconcilable in these positions. I mean you have got a little bit about who arbitrates, you have third party or FERC or nobody, and you have got the basic question of let the fence stay up or let the fence go down, but I think the market has almost dictated that the fence is going to come down. And I say almost because it is theoretical that you could keep it up.

So I really encourage you folks to put your thinking caps on and give the Congressmen from the region the best part of your wisdom this week or next week because at least in the House, at least at my subcommittee, we are going to try to move this train.

And with that, this hearing is adjourned.

[Whereupon, at 12:10 p.m., the subcommittee was adjourned.]
 [Additional material submitted for the record follows:]

PREPARED STATEMENT OF JAMES E. FERRELL, CHAIRMAN, COALITION FOR FAIR
 COMPETITION IN RURAL MARKETS

Mr. Chairman, on behalf of The Coalition for Fair Competition in Rural Markets (the "Coalition"), an organization comprised of private companies in the retail propane industry and of national and state propane trade associations, I appreciate the opportunity to submit written testimony as part of the record of the hearing on the role of the Tennessee Valley Authority that the Energy and Power Subcommittee of the House Commerce Committee conducted on September 13, 1999. I am grateful for the opportunity to discuss an issue that threatens the very existence of the nearly 8,000 small business owners who comprise our propane industry.

On behalf of the thousands of propane business owners across the United States, the Coalition submits for this committee's consideration information which demonstrates that Rural Electric Cooperatives (RECs), established for the sole purpose of generating and providing electricity to rural areas of the nation, are now taking advantage of their special status as federally subsidized, tax exempt organizations to enter retail propane gas distribution and other lines of business wholly unrelated to electricity. In doing so, RECs are leveraging the tremendous economic advantages that they alone enjoy as federally subsidized, tax exempt businesses to compete against private sector, mostly small, businesses which do not enjoy the same federal benefits. The unfairness and difficulty our industry faces is obvious. No business, small or large, can survive in the long-run competing against federally-subsidized, tax exempt operations.

From the outset, I must stress that while the Coalition believes there are significant questions about whether RECs can in fact legally enter new lines of business, we are not seeking Congressional action to prohibit RECs from entering the highly competitive propane market. Nor are we challenging the subsidies and tax benefits that RECs receive for their electric operations.

Rather, we are focused on the very narrow issue of ensuring that, if RECs are permitted to enter new lines of business, Congress act to require that such entry be on exactly the same basis as any private sector competitor—without the benefit of federal subsidies and tax exempt status. As Congress considers utility restructuring legislation in the coming weeks, this issue is the top priority of the nation's propane industry and is a fundamental "life or death" concern we urge you to address.

I. The Purpose of Rural Electric Cooperatives

RECs are independent, electric utility businesses whose primary purpose is to provide at-cost electric service to their customer/owners. RECs first received significant federal benefits in 1923 when section 231(10) of the Revenue Act of 1916, which provided exemption from federal income tax, to certain insurers, ditch/irrigation cooperatives, and telephone cooperatives was interpreted to also apply to Electric Cooperatives (That provision is now section 501(c)(12) of the Internal Revenue Code). The exemption from federal income tax remains one of the RECs' most valuable federal benefits. RECs received the other major component of their federal benefits advantage pursuant to enactment of the Rural Electrification Act (REA) in 1936. Beginning in the late 1930s, RECs became eligible for loans whose interest rates were subsidized by the federal government.

These federal benefits were granted to RECs not to foster competition with the private sector, but rather to encourage electrification of rural regions of the country which the private sector had avoided because it was not profitable. To the extent tax exemption and loan subsidy promote the original intent of the REA, which was the electrification of rural America, the Coalition perceives no issue requiring this committee's attention. However, to the extent the tax exemption and loan subsidy promote an anticompetitive advantage to RECs as they enter into the propane market and other sectors of the economy where robust private sector competition already exists, the Coalition perceives a profound threat to the fundamental values of a free-market economy and we urge Congressional action to correct this situation.

II. Anti-Competitive Advantage

Because of our industry's serious concern about the REC problem, we commissioned National Economic Research Associates (NERA), a nationally known economic consulting firm, to conduct an economic analysis of the problem. NERA's study, entitled "Why Entry by Rural Electric Cooperatives into Propane Distribution

is Anticompetitive," included some findings that were startling and sobering for our industry.

For example, NERA documented that dozens of RECs across the country have already entered the retail propane business. Undoubtedly, more will do so in the future. Most notably, however, the report found that REC entry into retail propane markets actually threatened competition (because subsidized, tax-exempt RECs drive out private sector competitors) and hurt consumers who in the long-run will suffer from a less competitive marketplace and higher prices. We have included a portion of the executive summary of the NERA report with our testimony.

Multiple propane retailers in most communities across the country are evidence of a vitally competitive retail propane industry. It is widely agreed that REC entry into the retail propane markets is not essential to reduce propane prices, to benefit rural economies or to serve unmet needs. In the absence of any compelling reason for the federal government to subsidize activity in the retail propane industry, REC entry only serves to distort free-market competition. RECs can threaten to skew standard competitive forces in three primary ways: anticompetitive cost-shifting, anticompetitive cross-subsidization, and misinformation to consumers.

Cost-shifting occurs if the costs incurred by a REC's propane affiliate migrate to the books of its core electricity business. These costs are subsequently recouped in higher electricity prices. Consumers are ultimately harmed in two ways: electricity prices are higher than they otherwise would be, and efficient independent propane distributors lose market share to the REC's propane affiliate, whose costs are artificially reduced by the cost-shifting. If the REC's propane affiliate then increases its share of the market significantly, the reduction in competition would provide it the opportunity to increase prices above competitive levels.

Cross subsidization occurs when the REC's parent electricity business supplies services to its affiliate but the affiliate does not compensate the parent for the true costs of these services, if at all. The most apparent example of cross-subsidization arises if the propane affiliate obtains access to low-interest loans that would not be available but for the special tax-exempt, government subsidized status of the parent REC. Such artificial interest-savings could significantly distort competition between REC propane affiliates and independent propane retailers who obviously lack access to discount capital. Cross-subsidization also occurs if the propane affiliate uses the REC's corporate logo and trademark—assets built up over many years with the benefit of tax-exempt status and federally subsidized loans. RECs also cross-subsidize their affiliate if the propane affiliate benefits from market intelligence that could only be obtained by the parent REC, such as Coop meter readers identifying which Coop customers have propane tanks on their property.

Finally, co-marketing and joint branding of electricity and propane by an REC and its propane affiliate may result in consumer confusion. Consumers may be falsely led to believe that propane services are regulated by state authorities; they might attribute a level of reliability or superior quality to the propane service; or they might question whether or not they are obliged to purchase their propane, as they are required to purchase their electricity, from the REC. To the extent consumers are misled on any of these issues, they may be willing to pay higher prices or accept lower quality for REC propane when, in fact, alternative suppliers provide cheaper and/or higher quality services.

Mr. Chairman, the anticompetitive harms just enumerated are not merely the hypothetical musings of an economist; they are real harms that are beginning to wreak havoc on the retail propane industry. To combat this threat to the open and fair competition that is so vital to our economy, the Coalition recommends immediate and decisive action by this committee so that RECs already active in, or contemplating entry into, the propane market will henceforth compete for market share without the unfair benefit of federal loan subsidy and exemption from federal income tax.

III. Examples of REC Activity in the Propane Business

To appreciate the great danger that federally subsidized, tax exempt Rural Electric Cooperatives present to the small business owners who comprise the retail propane industry, consider information regarding RECs operating in Alabama, Michigan, Kentucky, and Texas. These examples are representative of the anticompetitive activities engaged in by RECs nationwide:

Coosa Valley. In September 1996, Coosa Valley Electric Cooperative (Coosa Electric), a federally subsidized, tax exempt REC located in Taledaga, Alabama, purchased a 100 percent interest in an existing propane distributor (DeKalb), which retained its name and became the sole operating unit in a for profit subsidiary of Coosa Electric, known as Coosa Valley Propane Services (Coosa Propane). Information obtained through various public records indicate that Coosa Propane appears

to have been financed with federally subsidized, below market loans not available to private businesses in the local retail propane industry. Based on Coosa Propane's 1996 financial statements, Coosa Propane appears to have obtained the nearly \$3,000,000 required to purchase DeKalb and establish itself in the propane market by borrowing funds from the National Cooperative Services Corporation (NCSC), a subsidiary of the Cooperative Finance Corporation (CFC), which is a tax exempt, cooperative bank for RECs built on the subsidized, tax exempt earnings of Cooperative members. It also appears that Coosa Electric engaged in short-term borrowing of below market funds from CFC and then provided Coosa Propane with over \$250,000 in uncollateralized, non interest bearing loans to help meet Coosa Propane's start-up costs.

Moreover, Coosa Propane may have engaged in predatory pricing to obtain market share. Although it has not been possible to obtain a detailed account of Coosa Propane's finances, Coosa Electric's income statement for 1997 raises the real possibility that its subsidiary Coosa Propane, engaged in predatory pricing to gain local market share. The Coosa Electric income statement appears to show a loss of \$403,538 from its propane operations, based on propane sales of \$2,181,434 and propane expense of \$2,584,972.

Finally, unfair competitive advantage appears to have fueled explosive growth in DeKalb/Coosa Propane sales. In the first nine months following the acquisition of DeKalb, Coosa Propane increased DeKalb's annualized propane sales from roughly 1.75 million gallons to over 3 million gallons, an increase of over 70 percent. As one local propane businessman testified in a suit against Coosa Electric, "the growth of the propane industry is so small, the only way [Coosa Propane] can survive is by taking my customers."

Great Lakes Energy Cooperative. Great Lakes Energy Cooperative (GLEC) is a Michigan REC that vigorously promotes the idea of "one-stop shopping" for all of a customer's energy needs, including propane service. Materials obtained through public sources indicate that GLEC's for profit propane subsidiary is unfairly advantaged by combining business operations with GLEC, and by capitalizing on GLEC's reputation and trademarks, valuable business assets developed over many federally subsidized, tax exempt years. Also, GLEC customers have the option of receiving a single bill for both propane and electricity, and deal with both products at the same customer service centers and on the same world-wide-web site. Moreover, GLEC's logo is prominently displayed on the propane subsidiary's trucks and advertisements, providing the propane subsidiary the instant and commercially valuable assets of name recognition, reputation for reliability, and presumption of state regulation, attributes which adhere to the parent REC.

Additionally, federally subsidized, tax exempt GLEC use of meter-readers provides unfair competitive advantage over private, tax paying, non-subsidized propane retailers if the full cost of the meter-reader work for the propane subsidiary is not paid by GLEC. Public information indicates that GLEC meter-readers identify propane consumers for marketing campaigns and door-drop propane flyers, and enable GLEC's propane subsidiary to provide value added (e.g. "metered") propane service.

Kentucky RECs. Four RECs entered into for profit joint ventures with one of the nation's largest propane concerns and appears to have capitalized on the RECs' federally subsidized, tax exempt good will and customer lists to gain unfair advantage in the local retail propane markets.

Hilco Electric. In 1997, federally subsidized, tax exempt Hilco Electric Cooperative, located in Itasca, Texas, entered the propane market through a subsidiary and appears to have unfairly bolstered its subsidiary's competitive advantage by entering into a management contract to provide the propane subsidiary administrative and equipment services at below cost. Also, by making substantial capital investments on behalf of the subsidiary, investments later reimbursed by the subsidiary, Hilco appears to have conferred on the subsidiary the significant advantage of avoiding state sales tax.

Mr. Chairman, this anecdotal information represents only the tip of the iceberg, and is shared with the committee to illustrate the serious harm which can befall a small propane business when federal benefits skew competition in local markets. Short of Congressional action to bar RECs from the retail propane industry altogether, establishing a statutory regime that will ensure that neither federal subsidies nor tax benefits favor REC activity is an absolute necessity to ensure the continued viability of the nation's retail propane industry.

IV. Recommendation

Mr. Chairman, we believe a fair and equitable solution to this problem exists. In short, we believe the solution is to simply draw a clear and unambiguous line which prevents RECs from using their federal subsidies or tax-advantaged status to com-

pete in lines of business outside of electricity and to provide for public disclosure of REC finances and operations to ensure that anticompetitive cost-shifting and cross-subsidization are not occurring.

More specifically, we urge the committee to include a provision in the upcoming utility restructuring legislation that would:

- Unequivocally prohibit the use, directly or indirectly, of any asset or resource developed with federal subsidies or tax advantaged status, to compete in any line of business not directly related to the generation or sale of electricity;
- Require public disclosure from all RECs that engage in businesses unrelated to their core electrical service business of their business dealings in these lines of business. This disclosure must include details about the financing and operations of any subsidiary companies. The REC's finances must be transparent to ensure that anticompetitive cost-shifting and anticompetitive cross-subsidization do not occur; and,
- Include a private cause of action against an REC and/or its affiliate for violation of these provisions. Only by providing a credible policing mechanism can the committee ensure viable deterrence.

Mr. Chairman, we thank you for this opportunity to submit written testimony and to make you and this subcommittee aware of the serious situation the propane industry now faces. Utility restructuring legislation offers an excellent opportunity and vehicle for addressing and correcting the problem we face. We look forward to working with you and members of the Committee to address our concerns.